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The commander establishes his intent on how the unit will fight beginning the day he takes command.

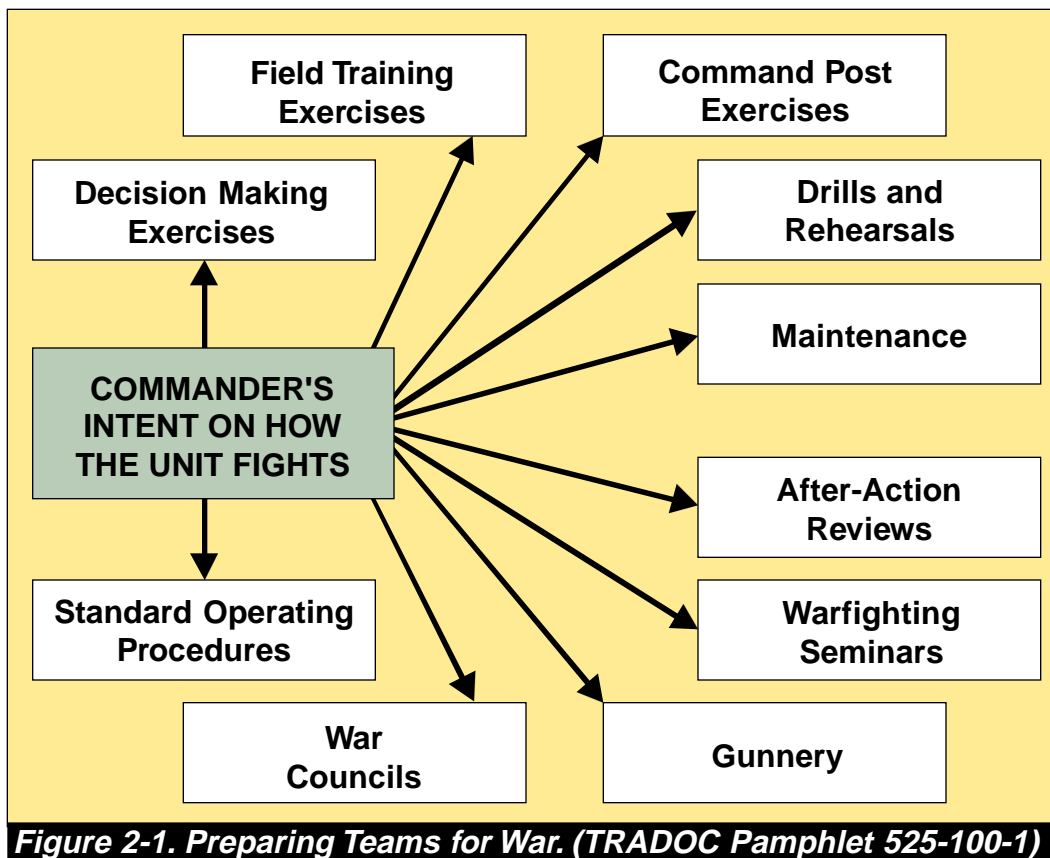


Figure 2-1. Preparing Teams for War. (TRADOC Pamphlet 525-100-1)

BATTLE COMMAND

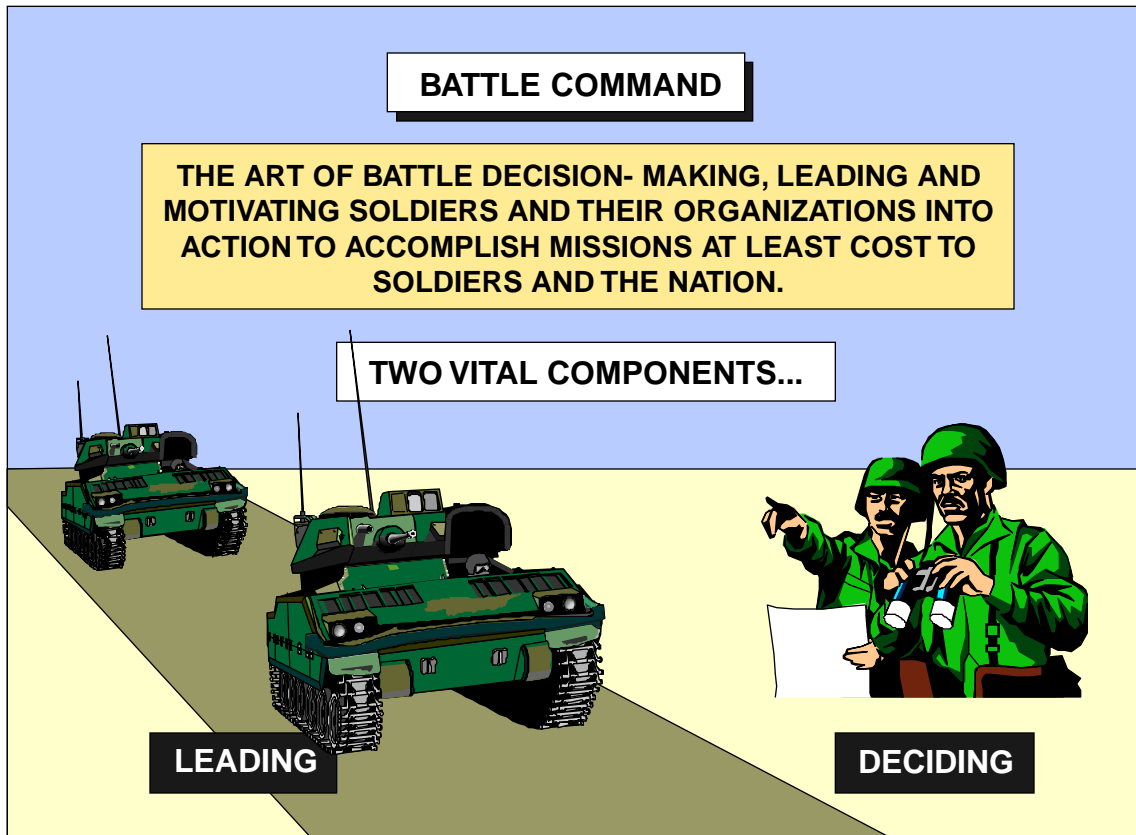


Figure 2-2. Battle Command (BCBL PAM 2.1).

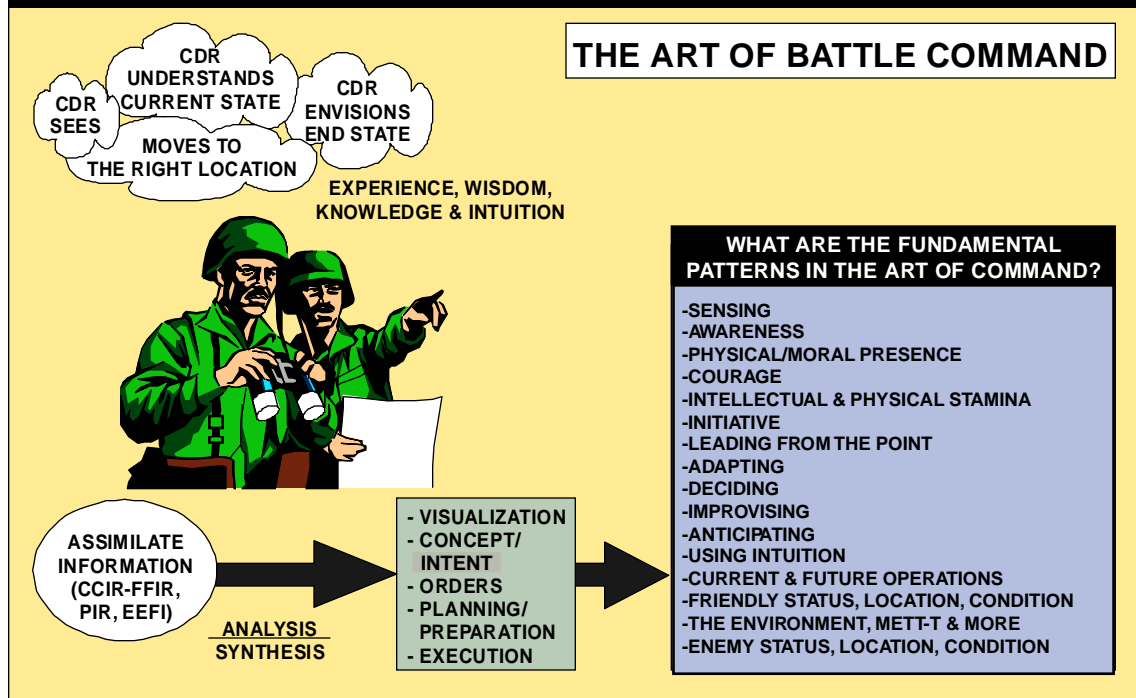
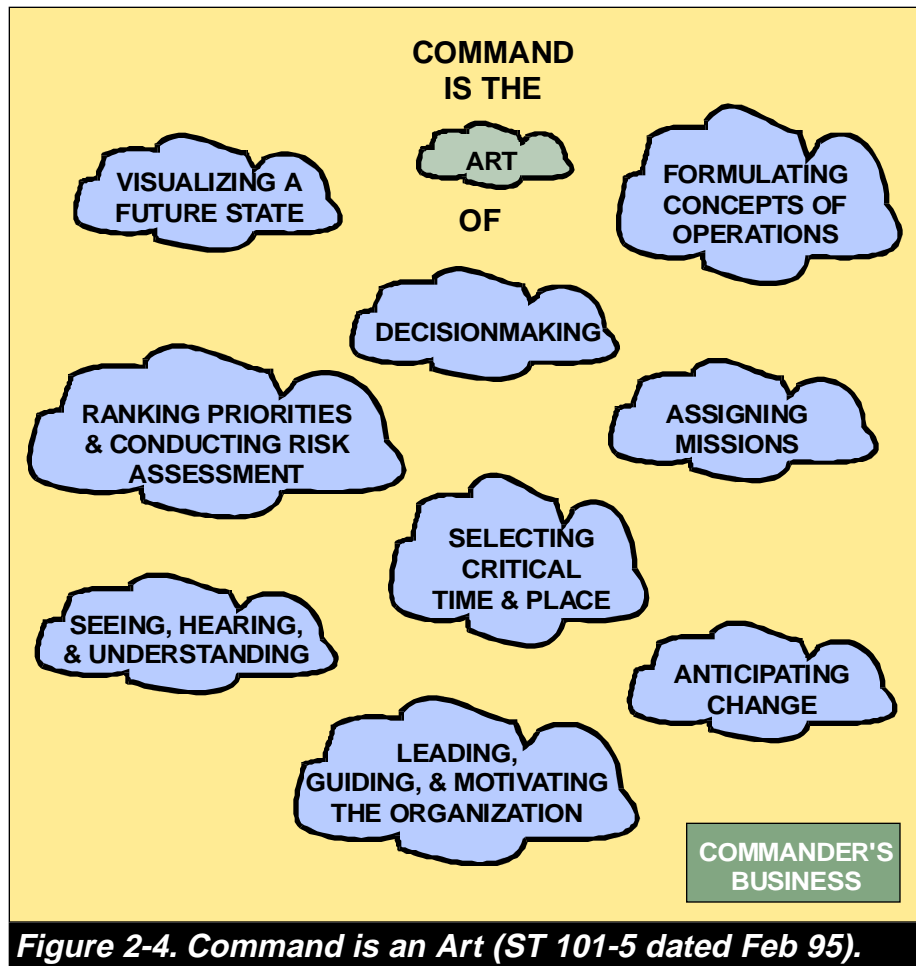


Figure 2-3. The Art of Battle Command (BCBL PAM 2.1).

Battle command comprises the ability to envision the activities over time and space necessary to achieve an end state, to translate and communicate that vision into a brief, but clear intent, to formulate concepts, and to provide the force of will through the presence of leadership throughout the battlefield that will cause the concentration of overwhelming combat power at the right time and place to win decisively with minimal friendly casualties. It includes the components of both command and control. Command (fig 2-4) is the art of war within the domain of the commander; control (fig 2-5), as the science of war, is within the purview of the staff.



■ COMMAND AND CONTROL ■

Command includes receptiveness to information, cognitive abilities to process the information, staff and commander analytical skills, visualization of future states, formulation of concepts of operations, selection of critical times and places, ranking tasks in priority, risk assessments, decision-making, and the assignment of missions. Command is separate and distinct from control.

Control connotes the science of monitoring statuses; identifying variances from initial calculations; correcting deviations from guidance; computing requirements; and measuring, analyzing, and reporting performance. Control is largely within the purview of staffs. Unlike command, control is a more empirical process.

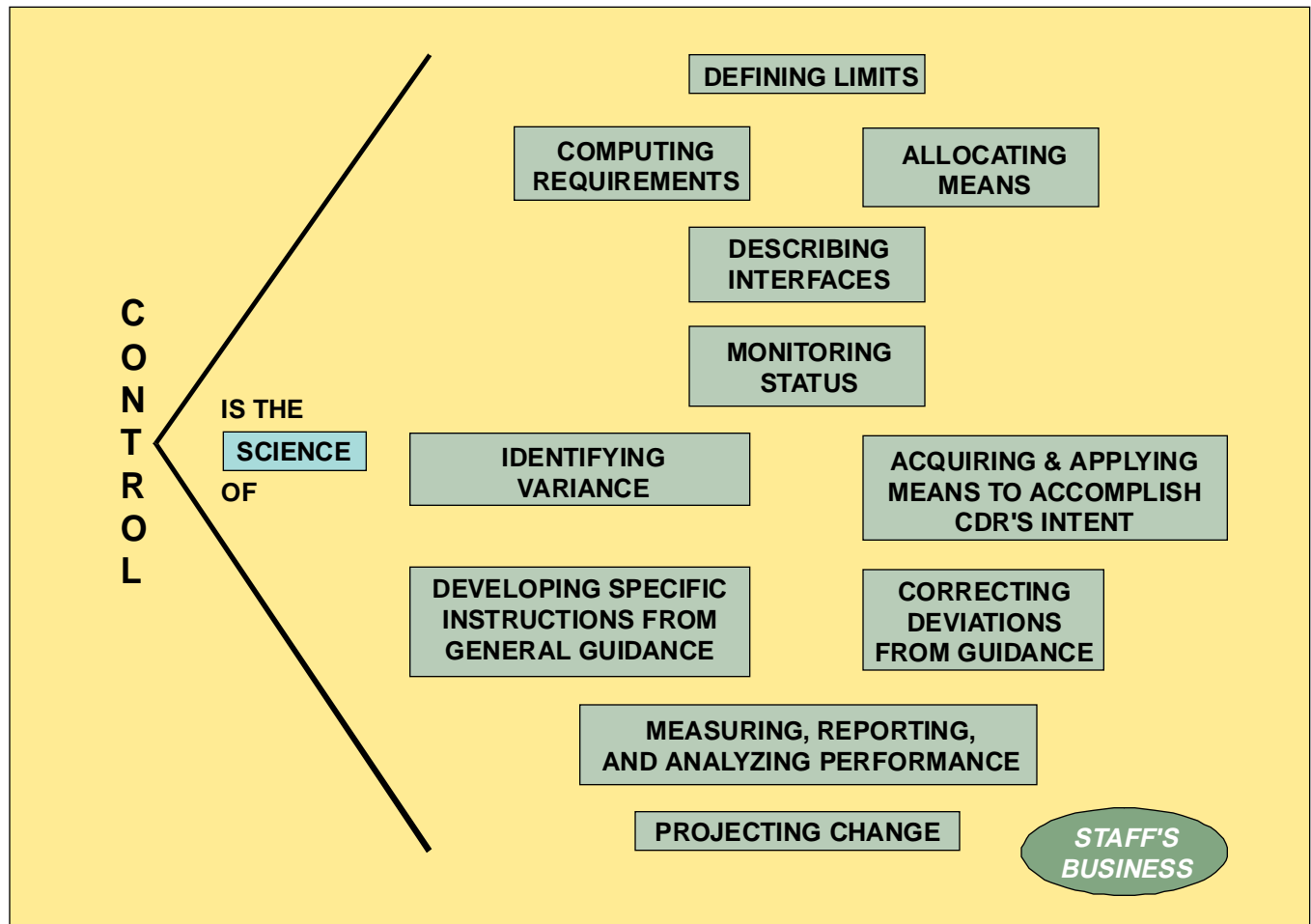


Figure 2-5. Control is a Science (ST 101-5 dated Feb 95).

THE TACTICAL DECISION-MAKING PROCESS (ST 101-5 dated Feb 95)

The tactical decision-making process (TDMP) is a three-method process that fosters effective analysis by enhancing application of professional knowledge, logic, and judgment. The methods are deliberate decision-making, combat decision-making, and quick decision-making.

The Army has traditionally viewed military decision-making as both science and art. Many aspects of combat operations, such as movement rates, fuel consumption, and weapons effects are quantifiable. Therefore, the Army considers them to be part of the “science” of war. However, the Army cannot quantify other aspects—the impact of leadership, the complexity of modern operations, and uncertainty regarding enemy intentions.

■ THE COMMANDER ■

A commander must continually face situations involving uncertainties, questionable or incomplete data, or several possible alternatives. As the primary decision-maker, he, with the assistance of his staff, must not only decide what to do and how to do it, but he must also recognize if and when he must make a decision. How he arrives at a decision is a matter of personal determination. However, superior decisions (those which offer the best solution available at the decisive time) result from a commander’s thorough, clear, and unemotional analysis of facts and assumptions. His analysis, coupled with his experiential “feel” for the battle, are the basis for his decision.

■ STEPS OF DECISION-MAKING ■

A systematic approach to decision-making, which fosters effective analysis by enhancing application of professional knowledge, logic, and judgment, consists of six broad steps:

- | | |
|----------------|--|
| STEP 1. | Recognize and define problems. |
| STEP 2. | Gather facts and make assumptions to determine the scope of and the solution to problems. |
| STEP 3. | Develop possible solutions. |
| STEP 4. | Analyze each solution. |
| STEP 5. | Compare the outcome of each solution. |
| STEP 6. | Select the best solution available. |

These steps are the foundation of tactical decision-making. As applied to the Army’s warfighting mission, they have evolved into what is now called the estimate of the situation.

■ ESTIMATE OF THE SITUATION ■

Definition. Joint Publication 1-02, page 79, defines the commander’s estimate of the situation as “a logical process of reasoning by which a commander considers all circumstances affecting the military situation and arrives at a decision as to the course of action to be taken in order to accomplish his mission.” It consists of four essential steps:

- | | |
|----------------|---|
| STEP 1. | Mission analysis. |
| STEP 2. | COA development. |
| STEP 3. | COA analysis (including a comparison of COAs). |
| STEP 4. | Decision (or recommendation). |

This estimate procedure is a logical and methodical process; it is conducive to collecting and analyzing information for developing the most effective solution to tactical problems given the time and information available.

All battlefields require commanders to make and execute decisions faster than the enemy. Therefore, the commander must always strive to optimize available time. He must not allow the estimate process to become inordinately time consuming. Consequently, the estimate process must be:

- Flexible
- Comprehensive
- Continuous
- Focused on the future.

Commander's Responsibilities. Although both the commander and staff prepare the estimate of the situation, it lies first and foremost in the commander's mind. He prepares the commander's estimate (either mentally or in writing) while continuing to collect and analyze mission, enemy, troops, terrain and weather, and time available (METT-T) as well as all other relevant factors which could affect the mission. He integrates his personal knowledge of the situation, his assessment of his subordinate commanders, any ethical considerations, and any relevant details gained from his staff. Analysis and subsequent comparison of developed COAs help determine the best COA to accomplish the mission.

COMMANDER'S ESTIMATE: A TECHNIQUE

- Visualize the enemy and terrain
- Review high-payoff targets (HPTs)—prioritized, acquired, and attacked
- Determine required effects, task/purpose, end state (by battlefield framework)
- Examples of effects are:
 - Suppress: State for how long and for what purpose.
 - Destroy/defeat: Specify what/how many and why.
 - Neutralize: what enemy capability/option is to be removed?
 - Disrupt: To prevent from doing what?
 - Delay: For how long and for what?
 - Limit: Deny a maneuver option (e.g., with family of scatterable mines [FASCAM]), for a specified purpose.

- Some battlefield framework considerations are:
 - R&S: Method to get battle damage assessment (BDA)
 - Deep: Prevent his use of FASCAM/Chem; neutralize the regimental artillery group (RAG) and division artillery group (DAG); destroy forward security element (FSE) to shape the battlefield
 - Close: Shape battlefield by denying an avenue of approach; want to mass to destroy armored gun battalion (AGB) here.
 - Rear: What is the greatest threat to friendly freedom of action?
 - Reserve: What is the risk of the unexpected?

■ THE DELIBERATE DECISION-MAKING PROCESS ■
(ST 101-5 dated Feb 95)

The commander normally has enough time for detailed planning before hostilities occur, and he uses the deliberate decision-making process (DDMP) (fig 2-6), a planning procedure based on the estimate of the situation and its methodical, sequential accomplishment.

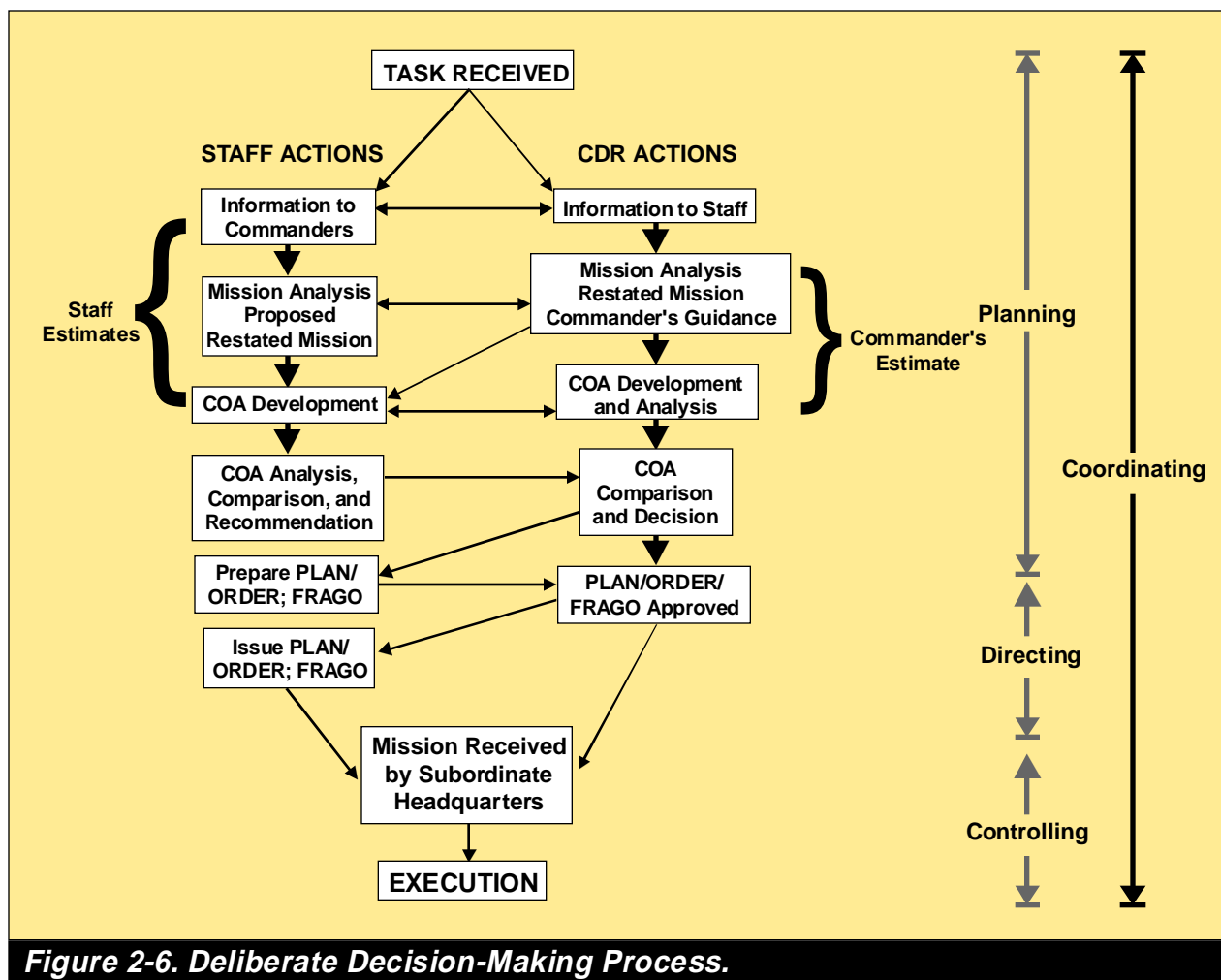
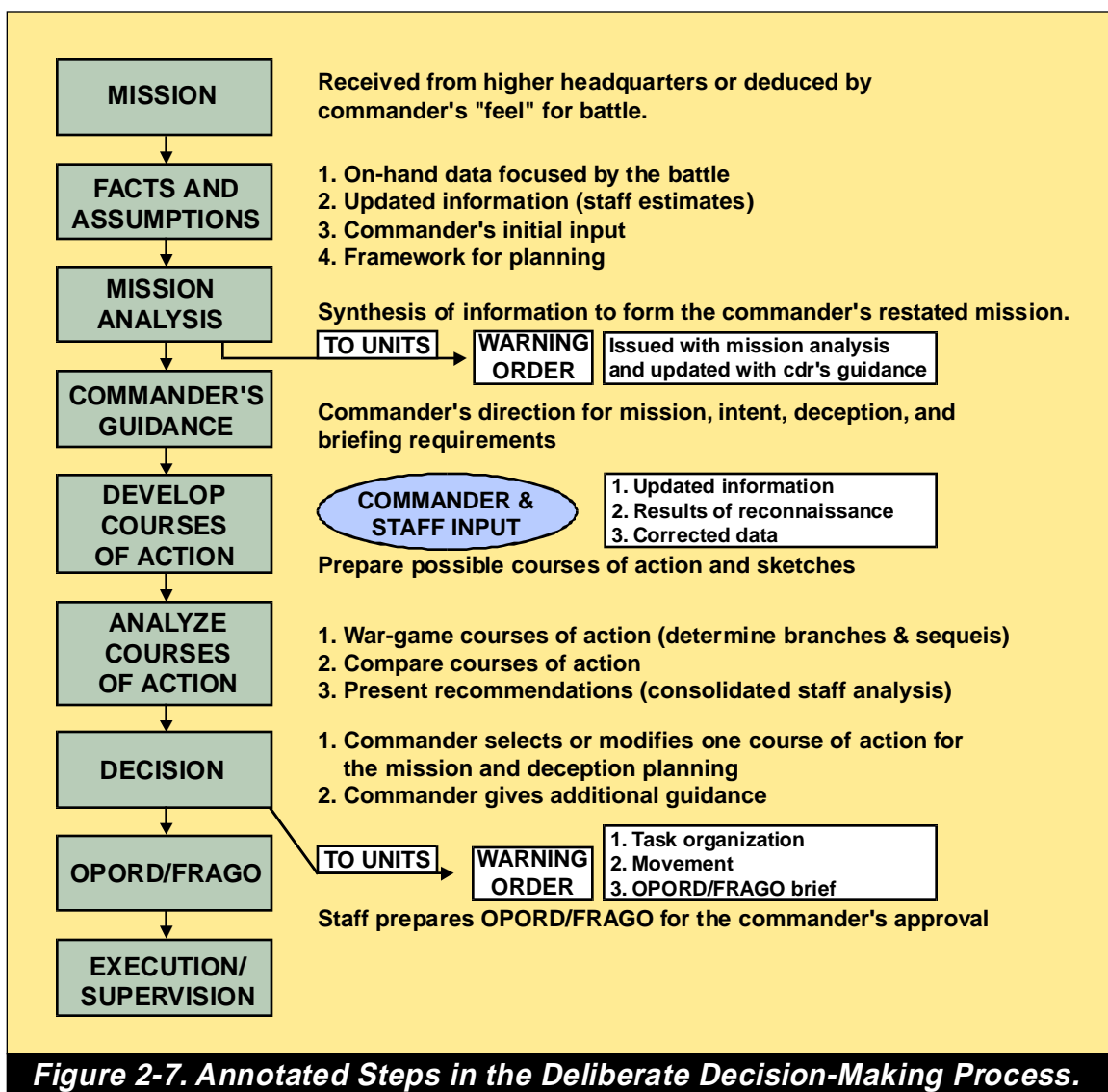


Figure 2-6. Deliberate Decision-Making Process.

Deliberate decision-making procedures also fulfill a planning requirement for minimizing risk through risk analysis. The commander performs risk analysis during:

- Mission analysis
- COA development
- COA analysis.

The DDMP (fig 2-7) usually begins with either receipt or deduction of a mission by the commander. The operation order (OPORD), which a unit receives from his higher headquarters, lists tasks the higher headquarters assigns to the unit. The concept of operation (or its subparagraphs which contain tasks to subordinate units) lists the unit's major tasks. At times, a commander may determine, on his own, that his unit must perform certain battlefield tasks.



■ COMBAT DECISION-MAKING PROCESS ■
(ST 101-5 DATED FEB 95)

The DDMP guides the decision-making process so the command arrives at an optimum solution to a tactical problem by analyzing a number of friendly options in detail against the full range of reasonable and available enemy options. The resulting plan then serves as an excellent and complete start point for later quick and effective adjustments as the command begins actual combat operations. However, once operations commence, a revised process is required. The fast tempo of the modern battlefield requires rapid, "close enough," acceptable decisions that allow the command to decide, move, and execute in the limited time available. This process is the combat decision-making process (CDMP).

Similarities between the deliberate and combat decision-making processes:

- Both processes represent the coherent mental activities that support sound decision-making. They both include the logical identification of the mission, development of concepts for executing the mission, evaluation of the concepts, and communication of the decision in a clear, concise manner.
- The commander is the prime mover in both processes, and both are part of the tactical decision-making process.
- Both processes allow for adjustment to the reality of the situation, and neither is a rigid, lockstep approach to decision-making.

Differences between deliberate and combat decision-making methodologies:

- The DDMP stops after a COA is developed into a plan or order.
- The DDMP is based on assumptions.
- The DDMP is primarily a sequential set of actions with discrete points in the process where decisions are made or additional guidance is given.
- In the DDMP, multiple COAs are analyzed against the full range of enemy options.
- The CDMP is ongoing; its goal is to maintain the initiative.
- The CDMP reflects real-time events.
- The CDMP is characterized by continuous planning for future events based on the commander's assessment of the outcome of the situation.
- In the CDMP, a single concept is normally evaluated against a limited number of, or a single most probable, enemy COA. Although not restricted to one COA, the commander's continuous involvement in the CDMP supports the development of one friendly and enemy COA to be analyzed with branch and/or sequel option development.
- While the commander is the most critical player in both processes, the staff has more latitude for involvement in the DDMP. The staff receives the commander's guidance or decisions at distinct points in time. They then gather, thoroughly analyze, and synchronize the information before further input from the commander. The commander personally drives the CDMP through to execution with the input of his staff. His experience and expertise are critical as he continuously conducts his personal assessment, formulates concepts, and makes decisions.

- The DDMP results in a thorough, detailed plan that is essential as an effective starting point for the command as it enters operations. The CDMP staff then adjusts that plan to arrive at rapid, acceptable decisions concerning the situation at hand. The DDMP sets the force and conditions that are absolutely essential for the CDMP to work.

Concept, planning and/or preparation, execution, and assessment (CPEA) methodology. The CPEA is a primary method of executing the CDMP. It focuses the commander's and staff's activities on proactive measures to maintain the momentum of planning and to sustain the initiative. The CPEA is characterized by intuitive, creative, parallel, and sequential actions by the commander and planning staff.

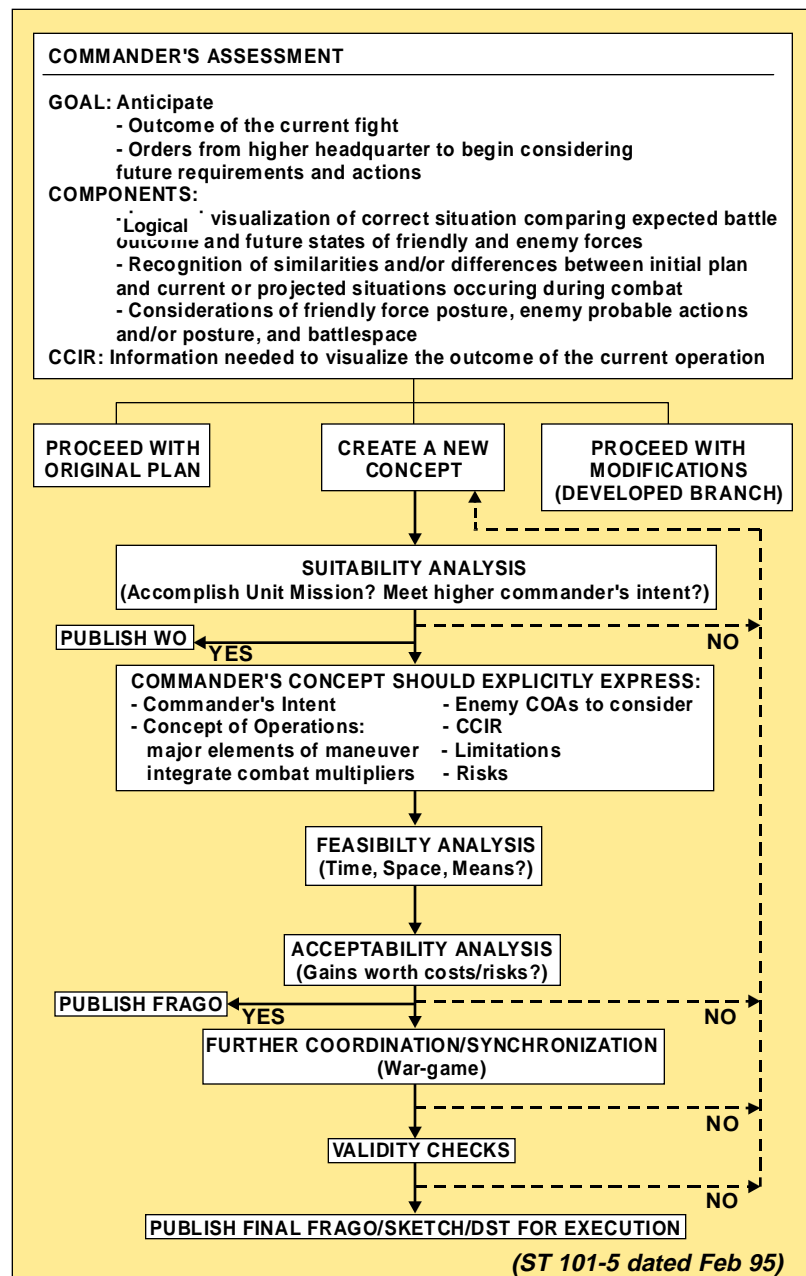


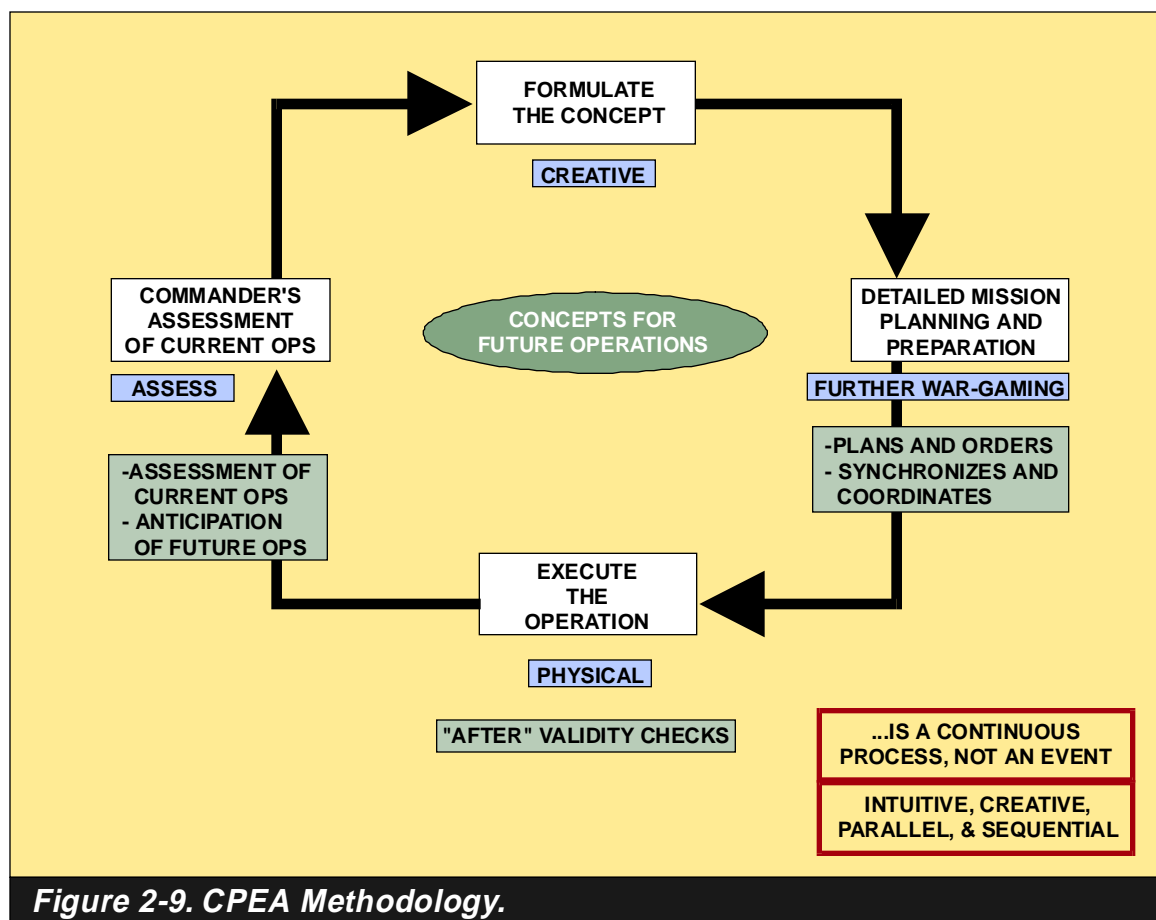
Figure 2-8. Combat Decision-Making Process.

In CPEA methodology, the commander and staff participate in three operations simultaneously: the current battle, the future battle being coordinated in detail, and its sequel being developed in concept form. (Division staff and higher are typically manned and equipped to conduct this CPEA methodology.)

The commander organizes his staff to conduct continuous operations without the plans staff becoming involved in current operations. If the commander cannot personally participate, he must identify key personnel who can continue CPEA functions.

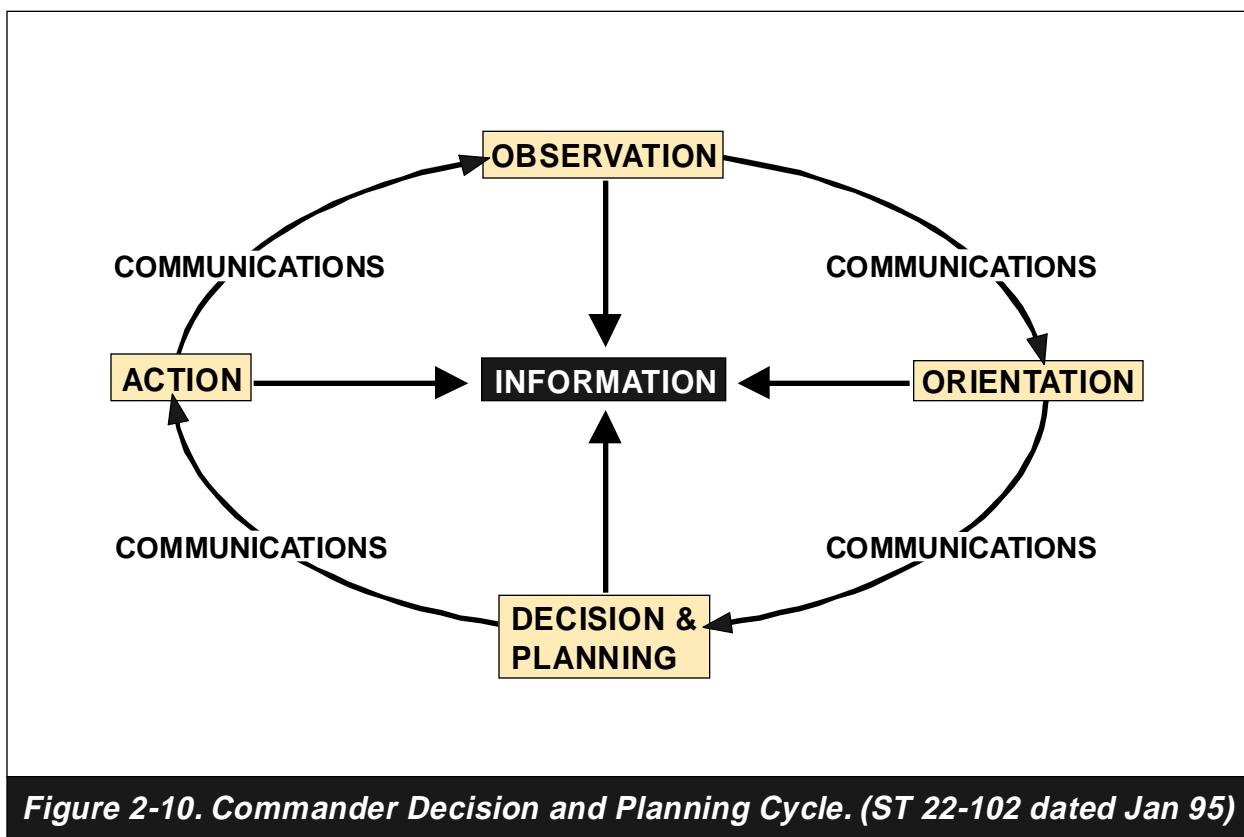
All levels of command from battalion and higher follow the CPEA concept; however, brigade and lower seldom plan three operations simultaneously as do division and higher levels.

Figure 2-9 is a graphic portrayal of the CPEA process. Figure 2-8 shows each step in the CDMF process as the commander conducts his ongoing assessment of the current operation in order to initiate planning staff actions. The goal of the commander's assessment is to anticipate the outcome of the current fight in order to begin considering future requirements and actions. The commander has the responsibility to focus continuous planning on future outcomes—not just on current battles.



COMPONENTS OF COMMANDER DECISION (FM 101-5, FM 7-20)

1. Commander's concept/intent.
2. Task organization (specific units to tasks).
3. Additional control measures.
4. Scheme of fires.
5. Command and control plan.
6. Critical combat service support (CSS) tasks/considerations.
7. Special instructions for attached elements or critical planning guidance for synchronization of remaining combat functions.



■ COMMANDER'S CONCEPT FORMULATION ■ (ST 101-5 dated Feb 95)

To conduct concept formulation, the commander evaluates whether or not the base plan is proceeding according to the original concept of operations. Three options are available to the commander based on his evaluation.

Option 1. He can proceed with the original plan if his assessment shows that the situation is close to that which was originally projected. He and his staff can then verify the original plan and estimates and issue fragmentary orders (FRAGOs) for the appropriate modifications.

Option 2. He can proceed, with modifications, if the future assessment does not match the original plan but it does resemble the situation addressed by a developed branch. The commander can then select the branch which most closely resembles the projected future outcome and modify it.

Option 3. He can create a new concept more appropriate to the assessed situation than either the base plan or one of its branches. He can then initiate the suitability, feasibility, and acceptability analyses (similar to those the staff initiates during the DDMP) before deciding how to execute the formulated concept.

■ SUITABILITY ANALYSIS ■

After formulating a concept or selecting a concept from an existing branch, the commander conducts a suitability analysis to determine if the concept meets the next higher commander's intent.

Suitability analysis is a part of the “art” of war because it primarily depends on the commander's knowledge and opinion. If it does, and it will also accomplish the unit's mission, the concept is deemed suitable and the commander issues a warning order. The concept should explicitly express:

- The commander's intent.
- The concept of operation, including major elements of maneuver for critical points in the battle and the integration of critical combat functions (fire support [FS], deception, aviation, deep operations, and so on) for that operation.
- Enemy COAs to be considered.
- Commander's critical information requirements.
- Limitations.
- Risks.

■ FEASIBILITY ANALYSIS ■

After the commander develops a suitable concept, he and his staff perform a feasibility analysis, which is a scientific and quantitative measurement of a concept. It correlates more closely to what is referred to as the “science” of war, because it primarily involves quantitative measurements. Initially, the plans staff conducts feasibility analysis to ensure the concept meets the criteria of time, space, and means. The staff determines the criteria by using the planning data available from historical and technical data combined with the subjective expertise of the staff and commander.

Time measurements are based on technical capabilities and historical data. They are used to calculate estimated event durations. Time is correlated to distances, speed, and capability rates in order to project enemy and friendly actions and then determine if sufficient time is available to execute the concept as designed.

Space analysis includes measurements to ensure that adequate ground and air space exists to conduct operations. Using tables of organization and equipment (TOEs) and experience, the staff estimates such items as the area required to deploy units for the concept, determine road requirements, identify depth requirements, and so on. The factors of METT-T dictate which space requirements are significant for a given concept.

Means analysis ensures that forces have the necessary combat power available to conduct operations. For example, the staff checks the relative force ratios at the critical events in the expected battle to ensure success of the main effort or quickly determines if enough bridging assets are available for a river-crossing operation.

If a concept is deemed inadequate in terms of feasibility, then the commander must modify it or select a new concept. He then conducts a new suitability check on the modified or new concept followed by appropriate feasibility checks. Once a concept passes suitability and feasibility analyses, the commander can analyze it for acceptability.

■ ACCEPTABILITY ANALYSIS ■

Acceptability analysis, the last check the commander performs before approving a concept, considers the factors of acceptable risks versus the desired outcome consistent with the higher commander's intent and concept. It is also an intuitive "art," like suitability, and is based on experience, expertise, and a firm understanding of the current situation. It is part of the commander's "command" function and allows him to determine if gains are worth expenditures and associated risks.

If the concept is acceptable, the plans staff publishes a FRAGO then further coordinates and synchronizes the command's activities to ensure optimum execution.

■ QUICK DECISION-MAKING PROCESS ■ (ST 101-5 dated Feb 95)

Commanders sometimes need to make quick battlefield decisions. Quick decision-making is necessary for commanders during situations whose time and/or staff is limited or who face an impending crisis. A commander at higher levels can also use quick decision-making when he does not have enough time to assemble a staff (such as when he is forward with his command group and an immediate change in the plan is required).

The commander bases his decisions on his analysis of METT-T factors, the war game, comparisons of feasible COAs, and his personal judgment. These, at times performed mentally, are also the central features of both the DDMP and the CDMP. The commander may execute the quick decision-making process in almost any sequence, with several actions occurring simultaneously, including:

- Receiving the mission.
- Making a tentative plan.
- Conducting reconnaissance.
- Issuing the order.
- Issuing the warning order.
- Starting movement.
- Completing the plan.
- Supervising and refining the plan.

■ **MAKING A TENTATIVE PLAN** ■
(ST 101-5 dated Feb 95)

Tentative plans are the basis for the OPORD. Leaders use the commander's estimate of the situation to analyze METT-T information; develop, analyze and compare COAs; and make a decision that produces a tentative plan. The leader continuously updates his estimate and refines his plan accordingly. He uses this plan as the starting point for coordination, reconnaissance, task organization (if required), and movement instructions. He works this problem through in as much detail as available time allows. The leader focuses on the following METT-T factors as the basis of his estimate.

- Mission. The leader considers the mission given to him by his commander, analyzing it in light of the commander's intent two levels higher, and deriving from it the essential tasks his unit must perform to accomplish the mission.
- Enemy. An analysis of the enemy includes processing current information concerning the enemy's strength, morale, organization, location, disposition, tactics, activity, equipment, and capability. He should also attempt to identify the enemy's threat to his mission as well as the enemy's greatest vulnerability.
- Terrain and weather. Analysis details information about vegetation, soil type, hydrology, climatic conditions, and ambient light data to determine the impact the environment can have on current and future operations for both enemy and friendly forces. Of particular concern are potential effects on observation, intelligence collection, and target acquisition and engagement resources available.
- Troops. An analysis of troops given the commander information on the quantity, level of training, and psychological state of friendly forces (including the capabilities of attached elements as he assigns tasks to subordinate units) as well as the availability of weapons systems and critical equipment.
- Time available. The leader analyzes time to determine how much is available, how it should be allocated, and how it will affect command and control (C²). Time analysis produces a schedule of activities that must occur. Since it drives everything the unit does, the commander personally approves this schedule.

When the commander completes his detailed analysis of the mission, he formulates his intent statement and deception objective, if appropriate. A commander with a staff would then issue his planning guidance. At lower command echelons where no staff is authorized, this step is omitted. During crisis situations, the commander may issue initial controlling instructions at this time.

TARGETING AND THE TACTICAL DECISION-MAKING PROCESS

The commander is responsible for the targeting effort even though he is assisted by his staff. Targeting is defined as the process of identifying enemy targets for possible engagement and determining the appropriate attack system to use to capture, destroy, degrade, or neutralize the target in question. Targeting is a process. It involves many actions to select the targets essential to the success of the friendly mission. Targeting also determines the best mix of sensor systems and attack systems, both lethal and nonlethal, to acquire and attack essential targets. The objective of the targeting process is to disrupt, delay, or limit enemy capabilities which could interfere with the success of friendly objectives.

For example, engineer bridging assets are a high value target (HVT) because they are critical to an enemy commander's ability to cross a river during an attack. If the friendly commander's concept of the operation is to defend along the river bank and prevent the enemy from forcing a river crossing, the bridging assets would likely be determined as high payoff targets (HPTs). But, if the friendly commander's concept of the operation is to allow the enemy to cross the river and then counterattack while his force is split on the two sides of the river, these bridging assets would not be an HPT.

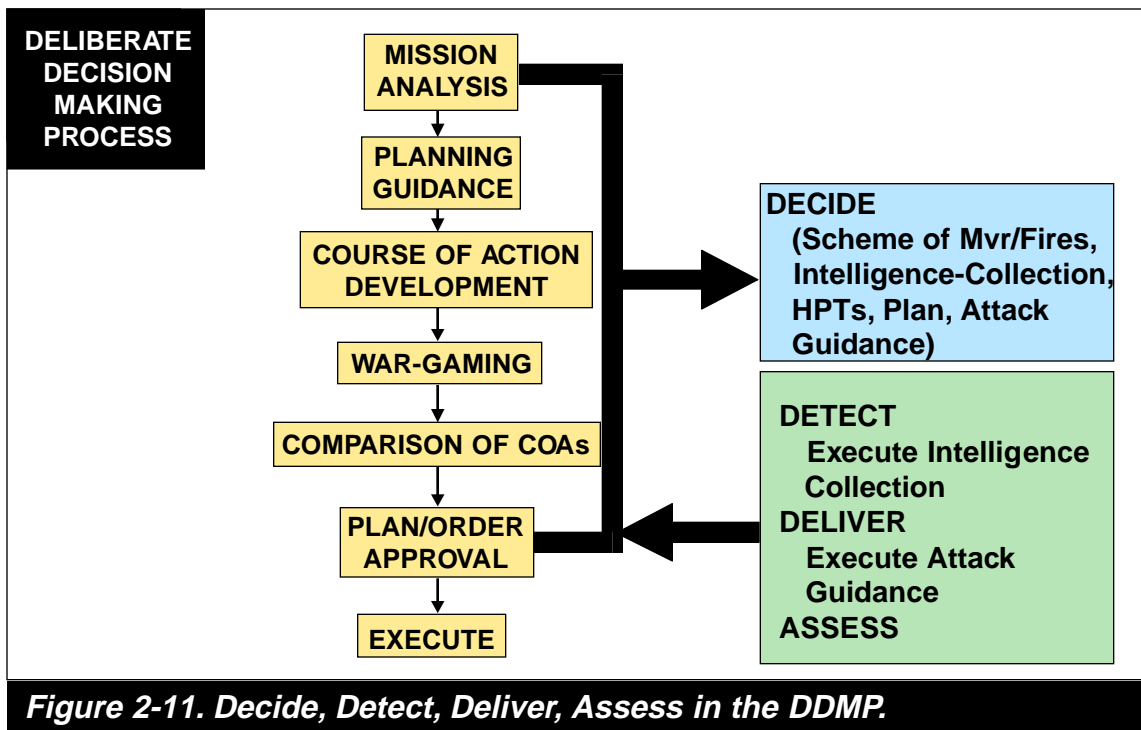
The development of HPTs from HVTs is begun during the war-gaming process. For further information on HVTs and HPTs, refer to FM 6-20-10 or FM 34-3.

The targeting process is a complex multidisciplined effort closely related to the tactical decision-making process. Targeting responsibilities exist among each of the BOSs. The targeting process supports the commander's concept of operations, including his scheme of maneuver and concept of fire support (FS), and requires an in-depth understanding of the mission, commander's intent, enemy, AO, and capabilities and limitations of sensors and attack systems. It is a team effort of the commander and his staff.

The commander and the entire staff must work together to synchronize all BOS. The targeting process must also include Air Force, Navy, and Marine support as well. Targeting is a joint and combined process. In addition to the commander, key staff agencies involved in targeting are the G3/S3, G2/S2, and fire support coordinator (FSCOORD). Other staff officers, including the air liaison officer (ALO), air defense artillery (ADA) officer, engineer officer, and G4/S4 also support the targeting process.

Targeting methodology is described as decide, detect, deliver, and assess. See FM 6-20-10 for specific tactics and procedures for the targeting process.

It is critical that only one person supervises the decide, detect, deliver, and assess targeting methodology. He may be the G3/S3, the Chief of Staff (CofS/XO), or the FSCOORD. The targeting methodology of decide, detect, deliver, and assess is closely related to the DDMP (fig 2-11). Both begin with analysis of the mission and the commander's planning guidance and intent.



MISSION ANALYSIS AND THE RESTATED MISSION (ST 101-5 dated Feb 95)

Mission analysis is critical to tactical decision-making. It begins with a review of the intent of the higher commander two echelons up. From the review, the unit commander derives the essential tasks the unit must perform to accomplish the mission.

The commander and staff determine specified, implied, and essential tasks that can and will directly affect successful accomplishment of the mission. In some cases, the commander may limit the facts and assumptions the staff will consider.

When time is short, the commander and staff can jointly conduct mission analysis in the form of a brainstorming session, or the commander may conduct mission analysis as strictly a mental activity.

COMMANDER'S MANDATORY STEPS IN MISSION ANALYSIS

- Specify the organization's essential tasks.
- Approve the restated mission.
- Provide guidance on desired end state, deception, and use of available time.

The restated mission is a short, concise statement that contains all the elements of the mission statement: "who, what, where, when, and why." These elements define both the tasks and purpose. For example, "3rd Brigade (who) attacks in zone at 180500 NOV (when) to seize (what) OBJECTIVE DOG (where) to allow 2d Brigade to continue the division's main attack north (why)."

MISSION ANALYSIS: A TECHNIQUE

1. Commander's mission/intent (2 levels up).
 2. Review AO and task organization; analyze concept of operations.
 3. Identify specified/implied tasks.
 4. Develop essential task list and restated mission.
 5. Review available assets, attachments/detachments.
 6. Identify limitations:
 - Restrictions: Things a commander cannot do.
 - Constraints: Limits to what commander can do.
 7. Command and control warfare (C²W) considerations.
 8. Propose acceptable risk.
 9. Determine critical facts/assumptions which affect mission.
 10. Review available time/time analysis.
 11. Draft restated mission.
 - Compare with higher mission/intent.
 - Check for 5 W's (who, what, when, where, and how), task, and purpose.
-

SETTING CONDITIONS FOR BATTLE (BCBL PAM 2.1)

"It is in the minds of the commanders that the issue of battle is really decided."

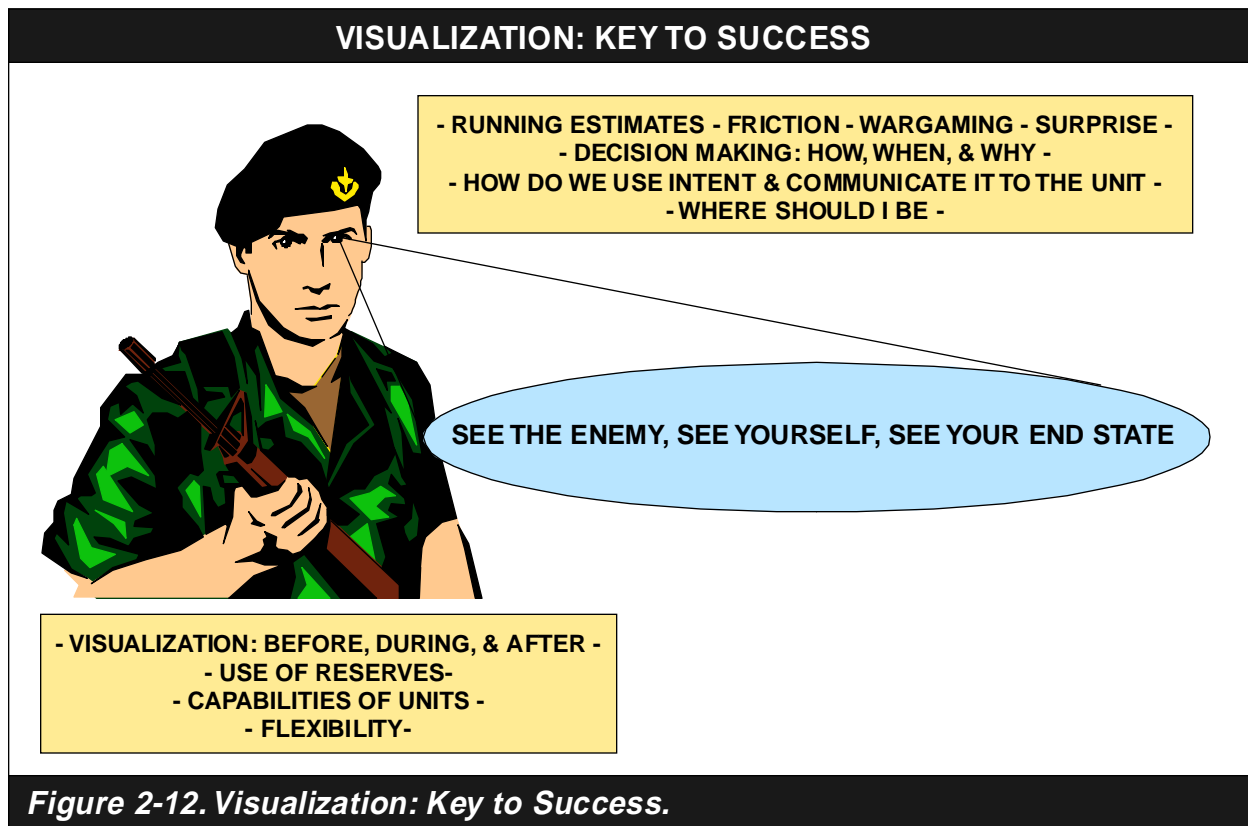
B.H. Liddel Hart
(*Thoughts on War*, 1944)

■ VISUALIZATION ■

Visualization is the act of forming a mental picture of the current and future state, based on a higher commander's intent, available information, and intuition. Seeing the enemy, friendly forces, and terrain in terms of time, space, and purpose form the basis of the commander's estimate. While a higher-level commander's intent may dictate a portion of the desired future state, the battle commander must possess the ability to envision his organization's future state within its battlespace.

■ CONCEPTUALIZATION ■

The concept of operation is the commander's stated visualization of the operation of the total organization. Connectivity must exist between current operations and the future plan. Beginning with intent and developed in conjunction with the staff, the concept of operation is a concise portrayal of how the commander visualizes the elements of the command operating together to accomplish their responsibilities and missions. The concept includes an overall scheme of operations, the necessary interfaces and coordination, the sequences from one phase to the next, the commander's priorities, and the acceptable risks. It must, in conjunction with commander's intent, enable subordinates to act in the absence of orders or in unforeseen situations.



VISUALIZATION CONSIDERATIONS: A TECHNIQUE

Factors Affecting the Commander's Ability to See the Battlefield:

- Position and location of key C2 nodes (main CP, TAC CP, Rear CP and command group).
- Integration and use of all collection assets (scouts, units in contact, jammers, collectors, counter intelligence, UAV, GSR, aviation).
- Information distribution and reporting systems and procedures.
- Location and position of key leaders.

See Themselves:

- Have you selected the right Friendly Forces Information Requirements (FFIR) and allocated means to ensure timely collection of this information?
- Given the forces and resources available, what are you capable of doing? Must you defend? Can you attack? Can you accomplish your mission without reaching a culminating point?
- What is the inherent agility of your force? How long does it take your units to receive orders, develop a plan, issue orders, and move with precision?
- Relative to your enemy are you more, less, or equally agile given your unit's demonstrated ability?
- How long can you fight without operational pause?
- What capabilities do you have which will help you shape the battlefield? How many obstacles and fighting positions can you actually create given the men, resources, and time available?

- Which of your subordinate leaders require detailed instruction and supervision to ensure your intent is accomplished?
- Which leaders require little guidance or supervision?
- Which subordinate commanders tend to be cautious?
- Which of them tend to be bold and aggressive?
- Which of them demonstrate tenacity and perseverance during adversity?
- Which are easily shaken by failure?
- How fast can your subordinate units perform their battle tasks?
- How long will it take your unit to move the required distance, occupy an assembly area, and perform pre-combat checks?
- How long does it take your artillery battalions to move, occupy a firing position, and prepare to shoot, given their level of training?
- How long does it take your MI units to move and establish an effective electronic collection and jamming capability?
- How many minutes or hours of smoke can your artillery generate given resources available?
- How many hours of surveillance will your UAV's provide under existing conditions?
- Are conditions set for effective synchronization of the combined arms of your force?
- Are all your combat systems postured to perform their tasks and achieve the outcome you desire?
- What is the length of your orders process?
- What is the minimum amount of time you need to issue an order and be assured your subordinate leaders down to crew level know what you want done and still have time to execute troop leading procedures?
- From your enemy's perspective, where are you strong? Weak? What critical capabilities or functions must you have and correctly employ to win? Which are vulnerable to attack and defeat?
- Are your forces protected from observation by the enemy, the effects of direct fires, fratricide, and the effects of weather, disease, and injury?
- What active and passive force protection actions should you take?
- Given your maintenance and repair capability, what level of combat power can you realistically sustain?
- How fast can you regenerate combat power?
- Do your CCIR change as the situation changes?

See the Enemy:

- What Priority Intelligence Requirements (PIR) have you established as part of your Commander's Critical Information Requirements?
- What are the enemy commander's objectives? What end state is he trying to achieve?
- What does he have to do to win?
- How will the enemy commander employ his capabilities to achieve his end state? Which capabilities are critical to achieving his end state? Which battlefield operating systems or combat functions are critical to his success?

- Given the enemy's capability to see the battlefield, can he be deceived?
- Which enemy capabilities must be effectively synchronized to achieve the effects and outcome the enemy commander expects?
- What is the enemy commander's capability to see the battlefield relative to yours? Does the enemy commander have the capability to see the battlefield, issue orders, and mass forces and effects faster than you can? If he does, what capabilities enable him to do it? Are they vulnerable to direct or indirect attack?
- What tempo of operation can the enemy generate? Slower, equal, or faster than you? How fast can he physically move, given terrain and the capabilities of his systems? Which capabilities give him the ability to sustain his tempo of operation and level of agility? Are they vulnerable to attack?
- How fast can he see, decide, and respond to actions on the battlefield? What is the tempo of his decision-making process?
- What is the physical endurance of his force? How far can he move and how long can he fight given the condition of his forces and his ability to sustain his force? Which sustainment capability is critical to successful accomplishment of his mission/objective? Which capabilities will preclude him from reaching a culminating point prior to accomplishing his mission? Are they vulnerable to attack?
- Within your area of operations, what effect will the terrain have on your ability and the enemy's ability to move forces, sustain mass and cohesion, and mass the effects of direct and indirect fires?
- Where will terrain constrict your movement, break up your formations, and create a piecemeal presentation of your force?
- What rate of movement can you realistically sustain given terrain conditions, visibility, and the effects of weather?
- Where can you use terrain to shape the battlefield and compel the enemy to go where your forces can generate overwhelming firepower, turn him and expose his flank to attack, commit his forces in a piecemeal fashion, or limit the total number of direct fire systems he can bring to bear? What terrain allows you to achieve these effects?
- Given the terrain in your area of operations, and the expected presentation of the enemy's forces, where will the enemy's forces be most vulnerable to the capabilities of your combined arms team? Where will he be most vulnerable to attack by close air support, disruption by artillery delivered mines, destruction by DPICM and COPPERHEAD, obscuration by smoke, disruption by jamming, destruction by attack helicopters, and destruction by your direct fire systems?
- Where can you use terrain to isolate enemy forces or separate enemy forces in time and space so he will never be able to bring overwhelming combat power to bear relative to your own capabilities?
- What terrain provides you the best ability to protect your force from observation by the enemy's reconnaissance and surveillance capabilities and the effects of enemy direct and indirect fires?
- How can you use the terrain to control the tempo of battle: delay the enemy's movement, or buy time to reposition forces or reinforce? What terrain affords you superior agility--the ability to move and mass fires faster than your enemy?

- What terrain will the enemy use to effectively employ his capabilities, achieve surprise, protect his force, mass direct and indirect fires, shape his battlefield, expose your flanks, create vulnerability in your force, fix and isolate your forces, or create superior agility?
- How can you use terrain to set conditions for seizing or retaining the initiative? What terrain allows you to create and sustain superior combat power? Where can you employ your capabilities to disrupt the synchronization of the enemy's combined arms team?
- Do your CCIR change as the situation changes?

See the Endstate:

- What does your enemy have to do to win? What must you do to win? How do your forces end up relative to the terrain and the enemy?
- How will he employ his capabilities to defeat you? Which capabilities are vital to your success?
- How will he use the terrain to effectively employ his capabilities?
- How will the enemy employ his capabilities to see the battlefield? When will they be employed? Where will they be employed?
- How will he shape the battlefield to his advantage? What capabilities will he use? Where will he use them? When will he use them?
- Which functions or capabilities are vital to his success? When and where will they be most vulnerable to attack, given your capabilities? When will an attack have the greatest effect?
- What must you do to seize or retain the initiative? In the course of the battle, when will the initiative hang in the balance?
- What sequence of critical actions must you accomplish to achieve your desired outcome?
- How long will it take you to accomplish each of your critical tasks? Can you accomplish your mission within the time required?
- What effects do you want to achieve against the enemy in deep, close, and rear operations? Where do you want to achieve these effects?
- How can you surprise the enemy? How can you strike him from an unexpected direction or time? When will he be most vulnerable to the effects of surprise?
- How can you compel the enemy to fight in two or more directions?
- How can you disrupt the synchronization of his combined arms team?
- How can you control the tempo of battle? When do you need to delay, fix, contain, or disrupt the enemy?
- When, where, and against which enemy force will you strike the decisive blow? How will you do it? What do you have to do to create conditions for its success?
- What critical decisions will you have to make during the course of the battle? When will you have to make them?
- What should be your main effort? When do you think you will need to shift the main effort?
- When will you reach your culminating point? What will cause it? When will you be required to take an operational pause to ensure you don't reach your culminating point? Where?

TROOP LEADING PROCEDURES **(ST 101-5, dated Feb 95; FM 7-20)**

Tactical decision-making occurs within the context of the eight-step troop-leading procedure (TLP) and encompasses the estimate of the situation. The eight TLP steps are:

1. Receive the mission.
2. Issue warning order.
3. Make a tentative plan.
 - Estimate the situation
 - Detailed mission analysis.
 - Develop situation and COAs.
 - * Enemy situation (enemy COAs).
 - * Terrain and weather (observation and fields of fire, cover and concealment, obstacles, key terrain, and avenue of approach [OCOKA]).
 - * Friendly situation (troops and time available).
 - * COAs (friendly).
 - Analyze COAs - wargame.
 - Compare COAs.
 - Decision.
 - Expand selected COA into a tentative plan.
4. Start movement.
5. Reconnoiter.
6. Complete plan.
7. Issue plan.
8. Supervise and refine the plan.

COMMANDER'S GUIDANCE **(ST 101-5 dated Feb 95)**

After the commander approves the restated mission, he gives the initial planning guidance. The guidance is essentially for timely and effective COA development and analysis. Whether the guidance is broad or restrictive, it should contain these elements:

- | | |
|---|---|
| <ul style="list-style-type: none">● Enemy courses of action● The restated mission● Intent● The concept of operation● The deceptive objective | <ul style="list-style-type: none">● Priorities● The time plan● The type of order to issues● The type of rehearsal to conduct |
|---|---|

Often commanders will include other elements in their guidance. The commander may provide either detailed or broad guidance, depending on the situation, time available, the level of training of the staff, and the information available. The intent and the concept of operation, however, are likely to be broad and very general so the staff's initiative and flexibility in obtaining information or developing COAs won't be limited.

OTHER ELEMENTS OF COMMANDERS GUIDANCE

- **Considerations for priorities and desired effects of fire support**
- **Reconnaissance and security plan**
- **Timing of operation**
- **Key terrain**
- **Force protection guidance**
- **OPSEC considerations**
- **Constraints imposed by higher**
- **Posture for sequels**
- **Guidance regarding reserves**
- **Forces forward of line of departure (LD)/forward edge of the battle area (FEBA)**

COMMANDER'S GUIDANCE BY BATTLEFIELD OPERATING SYSTEMS: A TECHNIQUE (Give Guidance by Effects)

1. Intelligence
 - Specific terrain or weather factors to consider
 - Air avenues of approach
 - Collection priorities (initial priority intelligence requirements [PIR]) and key reads
 - Use of brigade assets (COLT teams and intelligence and electronic warfare [IEW])
 - Use of task force (TF) scout platoons and dismounts
 - Counter-reconnaissance plan (composition/C²/task and purpose)
 - Control measures (brigade versus battalion security zone and responsibilities)
 - Reconnaissance and security (R&S) plan
 - Targets for voice collection, direction finder (DF), and jamming
 - Protection against enemy air assault
 - Deception (see item 10).
2. Restated mission
3. Commander's intent
4. Maneuver
 - Which (and how many) COAs to consider
 - Which COAs to NOT consider
 - Task and purpose/size/composition of reserve

- Where and how to kill the enemy (defeat mechanism)
 - How to shape the battlefield
 - Areas of denial or salient desired
 - Force allocation in battlefield framework
 - Security (shape enemy, deny info)
 - Main battle area (MBA) (designate, sustain, shift the main effort)
 - Deep (shape/attrit the enemy)
 - Reserve (size/composition, task and purpose, LOC, C²)
 - Rear (tactical combat force [TCF], priority of protection, focus of effort)
 - Use of MPs (traffic control points [TCP], enemy prisoners of war [EPW]); priority of effort
 - OPSEC considerations
 - Deception story and actions
5. Fire support
- Commander's intent for field artillery (FA), close air support (CAS), electronic warfare (EW), Army aviation fires
 - Effects desired, in terms of time, space and who is responsible for achieving these effects
 - How the intent for fires supports our maneuver
 - Target acquisition priorities; type of targets to engage and desired effects
 - Priorities of fire and how to shift
 - Force protection priorities; critical friendly zone (CFZ) placement
 - Counterfire priorities and use of Q36 radar
 - Protection of Q36 radars
 - Requirements, restrictions, and priorities for dual-purpose improved conventional munitions (DPICM), smoke, copperhead (CPHD), FASCAM, and illumination
 - Call for fire zones
 - Attack guidance (destroy, neutralize, suppress)
 - Place and time fire support is critical to the battle
 - Employment of brigade combat observation/lasing teams (COLTs)
 - Suppression of enemy air defense (SEAD) requirements
 - Maneuver of artillery
 - Fire support coordinating measures (FSCMs) (Coordinated fire line [CFL], free fire area [FFA], restrictive fire line [RFL], restricted fire area [RFA], no fire area [NFA]).
6. Mobility/survivability
- Priority of work (mobility [M]/countermobility[CM]/survivability[S])
 - Offense (CM, M, S)
 - Defense (S, CM, M)
 - Mobility
 - Main supply route (MSR)
 - Reserve
 - Maneuver forces (counterattack, defiles, breach)
 - Priority of support
 - Countermobility (how to shape battlefield)

- Intent of obstacles (disrupt, turn, fix, block)
 - Brigade-directed obstacles
 - Obstacle belts (closing of lanes/guarding obstacles)
 - Priority of support
 - Main avenue versus secondary avenue
 - Survivability
 - Intent for use of engineers
 - Blade priority (how many vehicles or fighting position dug in per unit)
 - Priority of support
 - Initial positions versus positions in depth
 - Use of engineer reconnaissance
 - FASCAM (where, when, why)
 - Delegation and restrictions
 - Reporting/marketing enemy obstacles
 - Breach operations (suppress, obscure, secure, and reduce [SOSR])
 - Marking lanes (day and night)
 - Control of Class I, IV, and V (forward support platoon [FSP] operations)
 - Labor support by maneuver force
 - Target turnover plan . . . who will guard obstacles
 - Obscuration for engineers putting in obstacles
 - Nuclear, biological, chemical (NBC)
 - Use of chemical reconnaissance
 - Mission-oriented protective posture (MOPP) level
 - Detection/reporting/marketing
 - Q36 to detect opposing force (OPFOR) firing air bursts (Ph I)
 - Avoidance of persistent chemical strike
 - Hasty decon considerations
 - Deliberate decon sites and plan
 - Masking/unmasking guidance
 - Use of M8 alarms and M8 and M9 paper
7. Air defense
- Criticality, vulnerability, and recuperability of friendly assets.
 - Threat air and ground courses of action
 - Passive air defense measures available to the force
 - Centralized/decentralized C²
 - Weapons control status (hold, tight, free)
 - Small arms forward area defense (SAFAD)/short range air defense (SHORAD) early warning procedures
 - High to medium altitude air defense (HIMAD)/SHORAD coverage.
8. CSS
- Commander's intent for support
 - Anticipated requirements and pre-stockage of Class III, IV, V
 - Priority of repair (units/equipment)

- Status by class of supply
 - MSRs and how to protect
 - Controlled supply rate (CSR) (decision on priority)
 - Medical evacuation assets and plan
 - Use of log birds
 - Rear area combat operations
 - Emergency resupply/casualty evacuation (CASEVAC)
 - Task and purpose for MPs (give priority of tasks)
 - Location of BSA (and who is there)
 - Need for a forward logistics element (FLE).
9. Battle command
- Current and anticipated command post (CP) locations
 - Command group
 - Tactical (TAC) CP
 - Main CP
 - Rear CP
 - Location of commander and S3
 - Succession of command (see tactical standing operation procedure [TACSOP])
 - Use of tactical FM and retrans
 - Signal operation instructions (SOI)/fill changeover time
 - Anti-jam plan (and frequencies)
 - Specific signal guidance
 - Liaison officer (LO) guidance
 - Requirements for lateral coordination
 - Force protection considerations
 - Time for brigade orders drill major events
 - Combined arms rehearsal
 - R&S rehearsal
 - FS rehearsal
 - CSS rehearsal.
10. Deception
- What I want the enemy to think
 - Task and purpose of deception plan
 - Use of decoys, movement, radio transmission

BATTLE COMMANDER'S INTENT
(ST 101-5 dated Feb 95)

"The intent should be expressed in three or four simple sentences that clearly state why the operation is being conducted, acceptable risk, desired end state, and how the force as a whole will achieve the end state."

White Paper, LTG John E Miller, Mar 95

The single most important thing a commander may be required to communicate is intent. The commander's intent is a concise expression of the commander's vision of the operation that focuses all subordinates on a common goal. The purpose of the intent is to describe what must be accomplished and why. It is the commander's statement of the end state and its purpose.

Each subordinate commander's intent must be framed and embedded within the context of the intent of the commander two echelons up. Intents must be nested, both vertically and horizontally, to achieve a common end state throughout the command.

The commander's intent is a broad vision, stated succinctly, of how to conduct the operation. The intent expresses the purpose of the operation, the acceptable risk, and may include how the posture of the units at the end state of the operation will facilitate further operations.

COMPONENTS OF COMMANDER'S INTENT (Battle Command PAM 2.1 (Draft), BCBL, dated 22 Apr 94)	
PURPOSE:	The reason for the conduct of the operation with respect to the mission of the next higher unit. The purpose explains, within the context of the mission of the higher unit, why the operation is occurring, and acceptable risk.
METHOD:	The "how" in doctrinally concise terminology explains the offensive form of maneuver, the alternative defensive pattern, or the retrograde operation the unit will use. It does not discuss details about specific subunits missions.
END STATE:	The relationship between the force, the enemy, and the terrain that describes the posture of the unit in relation to future operations, upon completion of the operation.
EXAMPLES OF COMMANDER'S INTENT STATEMENTS	
<u>Brigade Commander</u> My intent is to quickly expand the beachhead and pass the 1st (UK) Armored Division and elements of the VII Corps through to destroy Iraqi maneuver forces. We will expand the bridgehead, creating sufficient passage lanes for brigade-size follow-on units, and destroy enemy counter attacks. We are forced to conduct a frontal assault, and risk significant casualties. Avoid losses that cause any battalion to be unable to complete follow-on missions. Once the passage is complete, we will continue the mission as the division reserve and be prepared to continue our movement north.	
<u>Battalion Commander</u> We are the assault force in the brigade's deliberate breach of the enemy's defenses. We will destroy all enemy resistance in the vicinity and establish four lanes for the forward passage of follow-on forces. We will conduct a frontal assault into prepared positions and can expect significant casualties, but we must preserve sufficient combat power to defeat counterattacks and continue north as the brigade reserve.	

COMMANDER'S INTENT: A TECHNIQUE

1. Commander's stated vision of the battle:
 - Purpose
 - Method
 - Offense: Main attack, Reserve, Recon and Security, Deep, and Rear
 - Defense: Security Force, MBA, Reserve, Deep, and Rear
 - End state (include definition of success)
 2. Most important actions and desired end result of plan.
 3. How it is supporting higher commander's intent.
 4. How all efforts (CBT/CS/CSS) support the main effort (obstacles, fires).
 5. Where and how enemy will attack and where and how I'll kill him.
 6. Battalion commanders recite my intent during rehearsal.
 7. Ensure that CO/TM commanders know brigade commander's intent.
-

RISK CONSIDERATIONS (ST 101-5 dated Feb 95)

"It is my experience, that bold decisions give the best promise of success. But one must differentiate strategical and tactical boldness and a military gamble. A bold operation is one in which success is not a certainty but which in case of failure leaves one with sufficient forces in hand to cope with whatever situation may arise. A gamble, on the other hand, is an operation which can lead either to victory or to complete destruction of one's force. Situations can arise where even a gamble may be justified--as, for instance, when in the normal course of events defeat is merely a matter of time, when the gaining of time is therefore pointless and the only chance lies in an operation of great risk.

"The only occasion when a commander can calculate the course of a battle in advance is when his forces are so superior that victory is a foregone conclusion; then the problem is no longer one of 'the means' but only of 'the method.' But even in this situation, I still think it is better to operate on the grand scale rather than to creep about the battlefield anxiously taking all possible security measures against every conceivable enemy move."

Field Marshall Erwin Rommel

(From the Rommel Papers, by B.H. Liddell Hart, Harcourt Brace & Co., NY 1964)

RISK MANAGEMENT (ST 101-5 dated Feb 95)

The risk assessment procedure begins with mission analysis and continues throughout the planning, preparation, and execution phases.

- Is a problem-solving method that identifies areas presenting the highest risk to force protection.

- Is a detailed analysis of each COA and C2 and prevents fratricide (procedural and positive [P2]) measures identified during the war game.
- Identifies actions that could help eliminate, reduce, or minimize risk while maximizing force protection.

Commanders effectively manage risk by:

- Seeking optimum, balanced performances from their command
- Selecting the best risk-reduction options from those that the staff provides
- Accepting or rejecting residual risk, based on perceived benefits.

RISK ASSESSMENT MATRIX							
				PROBABILITY			
			Frequent	Likely	Occasional	Remote	Unlikely
			A	B	C	D	E
E F F E C T	Catastrophic	I	Extremely High	Extremely High	High	High	Medium
	Critical	II	Extremely High	High	High	Medium	Low
	Marginal	III	High	Medium	Medium	Low	Low
	Negligible	IV	Medium	Low	Low	Low	Low

RISK MANAGEMENT PROCESS	
1. Identify hazards:	Identify hazards or factors that may adversely affect mission accomplishment.
2. Assess hazards:	Determine extent of hazard detrimental to mission.
3. Make risk decision:	Reduce risk to that which is mission essential.
4. Implement controls:	Establish measures necessary to control risks.
5. Supervise:	Ensure control measures are followed.

DECISION LEVEL FOR RESIDUAL RISK	
Extremely high:	MACOM commander
High:	Corps/division/installation commander
Medium & low:	Delegated to appropriate level

SOME FACTORS TO CONSIDER IN RISK MANAGEMENT

Level of activity Inherent dangers of equipment used Adequacy of directions given Personnel/organization proficiency Availability of protective equipment Condition of personnel	Hazardous materials used Environmental concerns Complexity of movement Complexity of mission Operational conditions	Supervision Level of planning Adequacy of site Accident frequency Weather
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Leaders must also balance the cost of risk with the value of the desired outcome. They must consider and manage risk in making such decisions, using the following three general rules:

1. Never accept an unnecessary risk. The leader who has the authority to accept or reject a risk is responsible for protecting his soldiers from unnecessary risk. If he can eliminate or reduce a risk and still accomplish the mission, the risk is unnecessary.
2. Make risk decisions at the appropriate level. The leader who must answer for an accident is the person who should make the decision to accept or reject the risk. Small-unit commanders and first-line leaders might also have to make risk decisions during combat. They should learn to make risk decisions during training.
3. Ensure that the benefits of a prudent risk outweigh the possible cost of the risk. Leaders must understand the possible risk and have a clear picture of the benefits to be gained from taking that risk.

Additional detail and information on risk assessment and management can be found in FM 101-5, *Command and Staff Decision Processes*, chapter 4 and appendices F and N.

TIME MANAGEMENT (ST 101-5 dated Feb 95)

"You can ask me for anything you like, except time."
Napoleon

The element of time is not clearly identified for analysis in any of the estimate processes. However, time is critical to planning and executing successful operations and must be considered an integral part of mission analysis. The commander must require the staff to continuously conduct time analysis until the unit accomplishes the mission. This implies that the commander must continuously balance detailed planning against maximizing speed and surprise by immediate action.

CONSIDERATION FOR TIME MANAGEMENT DURING PLANNING

- The available time (using the reverse planning process)
- The complexity of the mission
- The position of forces
- The planning requirements to conceive and synchronize mission execution
- Combat preparations (including subordinate unit planning, movement, logistic preparations, reconnaissance, rehearsals, and combat inspections)
- Ambient light conditions for mission execution and combat preparation
- How and where the order will be issued

Rules, such as the 1/3 to 2/3, or the 1/5 to 4/5, are useful as planning factors. However, as with all planning factors, planners must modify them to fit the situation.

COMMANDER'S CRITICAL INFORMATION REQUIREMENTS (FM 101-5)

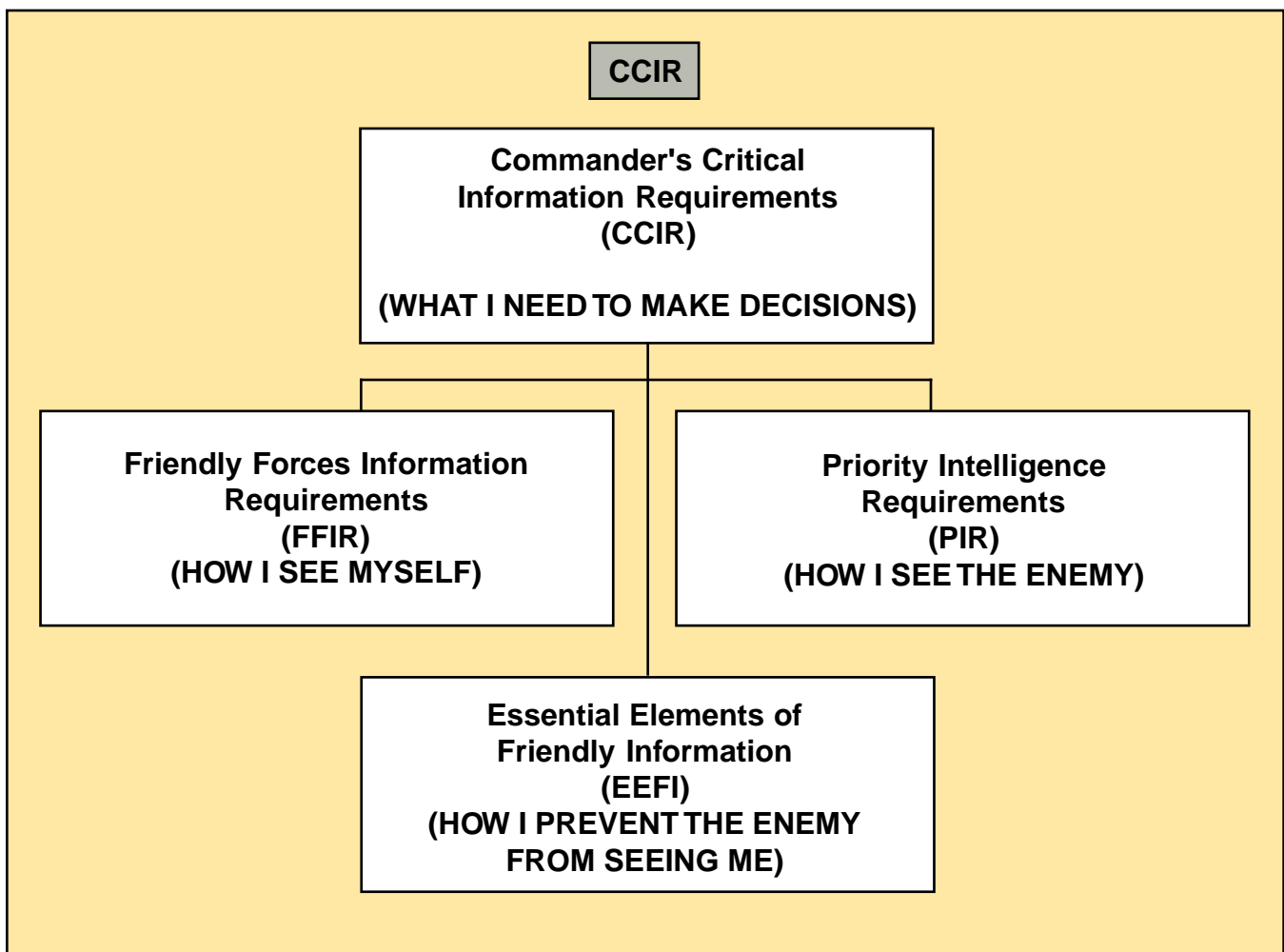
Critical information impacts strongly upon the successful execution of operational or tactical operations. The CCIRs are previously unknown but needed information of such critical importance to a commander's decision-making process that they directly affect the successful execution of operations.

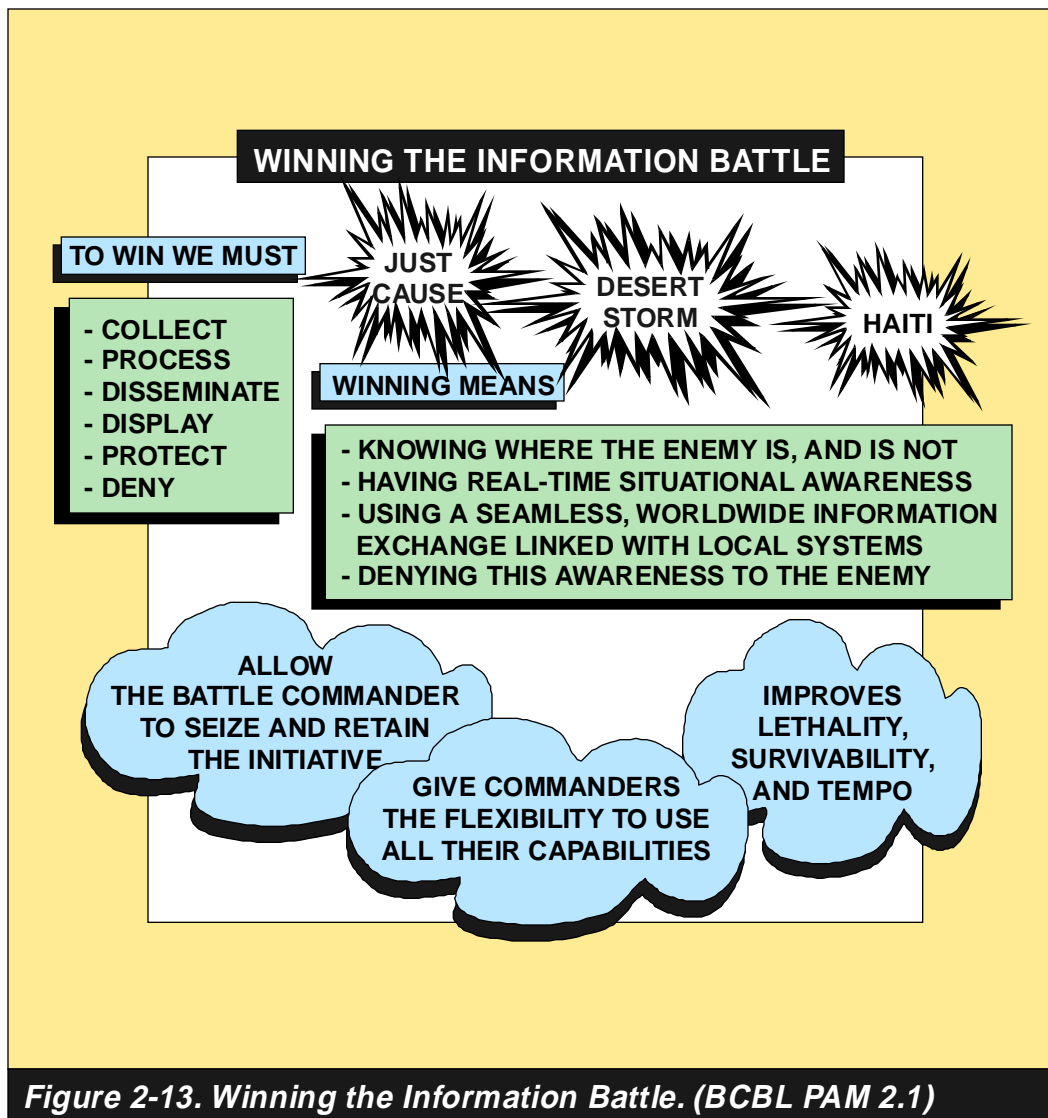
CCIR enable the commander to reduce the abundant information found in combat and the confounding effect of information overload by thinking through what is important and what is urgent but not important to mission accomplishment. They allow the commander to define information needs and, in turn, to focus the efforts of subordinates in acquiring, processing, and filtering information. CCIR communicates previously unknown information that the commander needs and considers critical to determine a COA and then to continually validate the selected COA. CCIR ensure that information transmitted to the commander is meaningful and readily recognized as critical to the visualization of the situation. The commander alone decides what information is deemed critical, based on the mission and experience.

ATTRIBUTES OF CCIR

- Situationally dependent, predictable information
- Specified by the commander for each separate operation
- Critical to the successful execution of the operation and mission
- Generally time-sensitive in terms of formalizing decisions at specific decision points
- Applicable only to the commander who specifies it
- Normally, published in an OPORD or OPLAN (some CCIR may originate from the standing operating procedure [SOP])
- Normally, transmitted over predetermined channels, if possible via face-to-face communication
- Directly linked to present and future tactical situations

NOTE: CCIR are not simply extracts from a higher headquarter's OPORD.





The commander can help the staff gather necessary information and preclude duplicating effort or gathering unnecessary information. He does this by focusing the efforts of the staff on essential information that he needs to make informed, timely decisions. This requires him to clearly define the requirements necessary to make decisions and express those requirements to the staff so that information gathering is made more timely and efficient.

The commander's critical information requirements (CCIR) depend on the concept of the operation, the key decisions the commander is likely to have to make, and the type of information required to support each key decision. Once CCIR are identified, responsibility for providing that information to the commander wherever he is on the battlefield can be established. Information management ensures the battle command system delivers information for the few key decisions the commander will make at the right place, at the right time.

GENERATION AND PROCESSING OF INFORMATION REQUIREMENTS

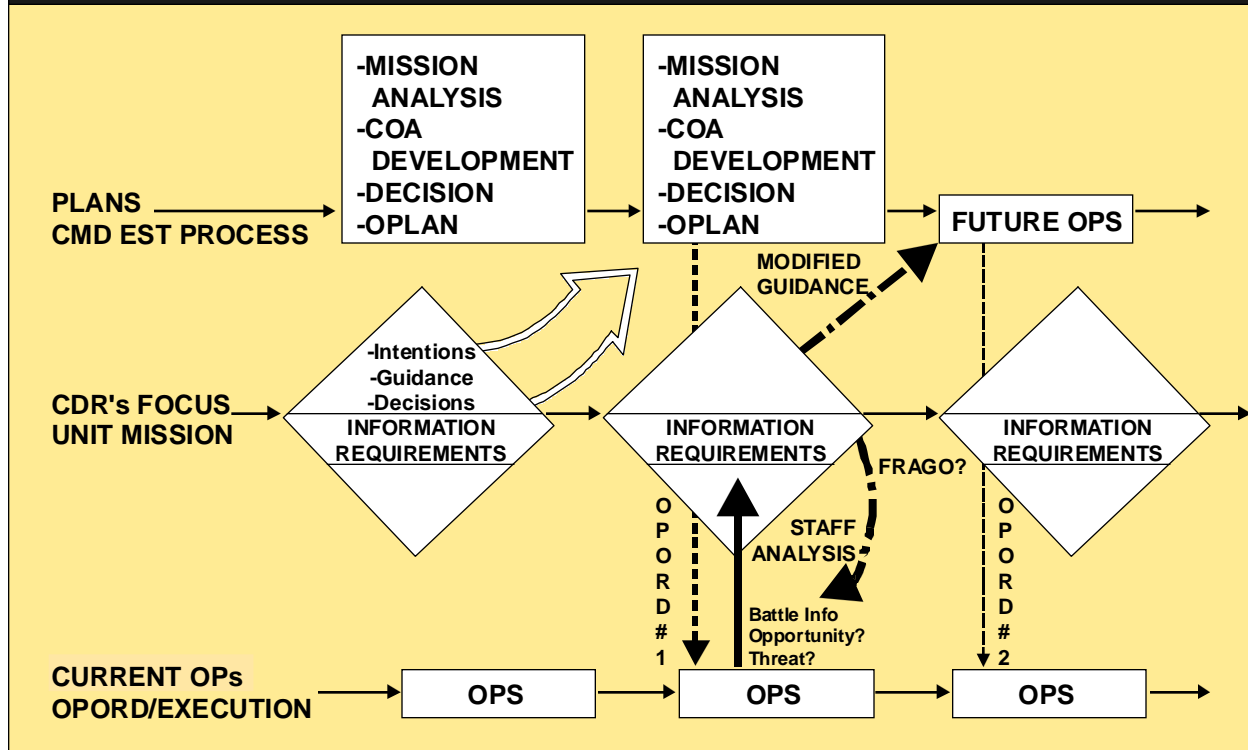


Figure 2-14. Generation and Processing of Information Requirements.
(Source - BCBL Study)

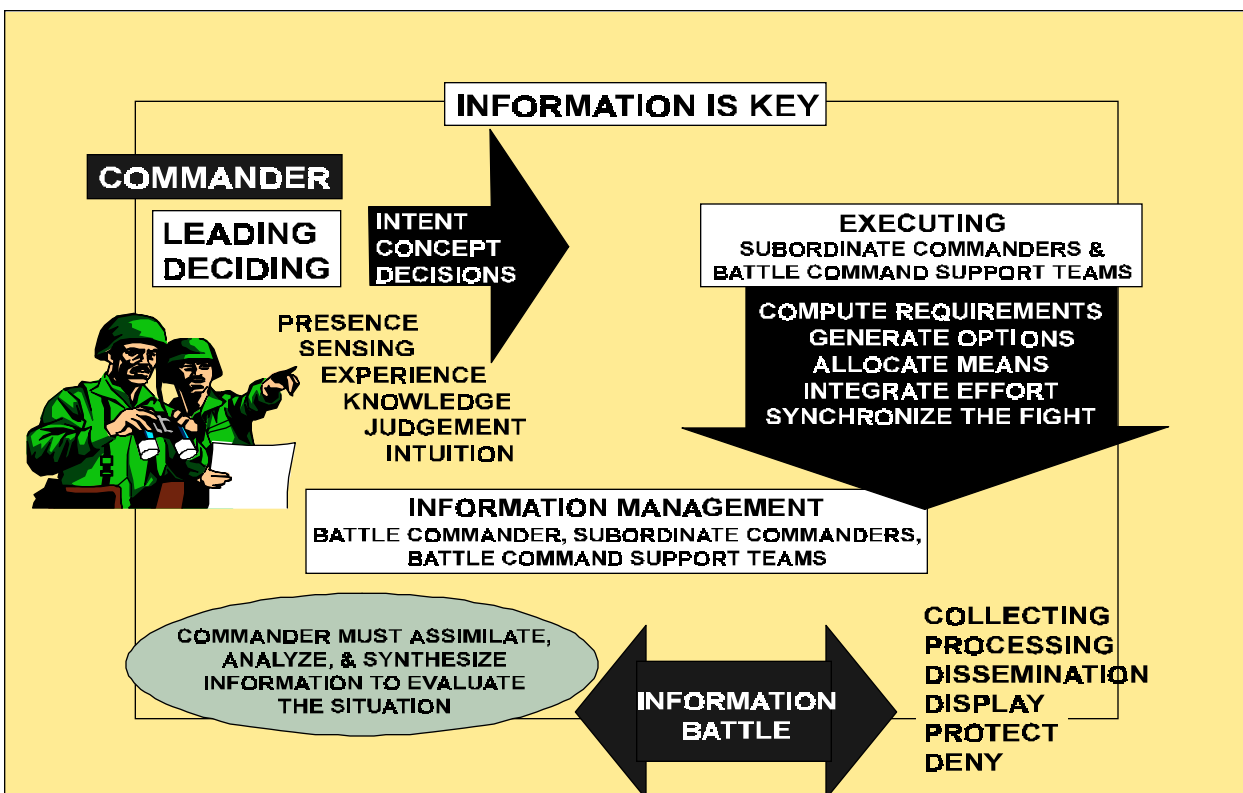


Figure 2-15. Information is Key. (BCBL PAM 2.1)

DESCRIPTIVE OF EXCEPTIONAL INFORMATION AND ITS USES

- Is neither published nor explicitly stated; rather, it must be implicitly recognizable as vital by tactically and technically competent subordinates and staff
- Is specific and immediately vital information
- Directly affects the success of the current operation
- Signals the occurrence of unpredictable, extraordinary events
- Is extremely time-sensitive in terms of decision-making. There must be no delays in transmission.
- Is transmitted directly to the commander in as near real-time as possible by whatever immediate means are available, skipping echelons if necessary
- Is an immediate priority for staff or subordinate command action
- Is applicable to both the friendly and enemy situations.

NOTE: Reporting exceptional information is analogous to management-by-exception.

TASK ANALYSIS FOR INFORMATION REQUIREMENTS GENERATION IN THE COMMAND ESTIMATE PROCESS

INPUT	PHASES	PRODUCTS
Standing CCIR Current staff estimates	MISSION ANALYSIS: <ul style="list-style-type: none"> - Identify specified, implied, and essential tasks - Identify PIR, IR, EEFI, and FFIR - Determine facts and assumptions 	MISSION ANALYSIS BRIEFING: <ul style="list-style-type: none"> - Commander guidance - Facts and assumptions - Information requirements
Standing CCIR Current staff estimates	COA DEVELOPMENT: <ul style="list-style-type: none"> - Update staff estimates - Identify the following for each COA: <ul style="list-style-type: none"> - Critical facts - Critical assumptions - Critical events - Develop conclusions 	COA DEVELOPMENT BRIEFING: <ul style="list-style-type: none"> - Updated staff estimates - Critical facts, assumptions, events, and conclusions - Information requirements

TASK ANALYSIS (CONTINUED)		
INPUT	PHASES	PRODUCTS
Standing CCIR Current staff estimates	COA ANALYSIS AND COMPARISON (WARGAME): <ul style="list-style-type: none"> - Identify critical facts, assumptions, events, and decision points during wargame for each COA - Develop DST and decision support matrix for each COA - Generate information requirements to support DST and decision support matrix 	DST AND DECISION SUPPORT MATRIX: <ul style="list-style-type: none"> - Information requirements
Standing CCIR Current staff estimates	DECISION: <ul style="list-style-type: none"> - Conduct decision brief - Review information requirements - Approve CCIR - Integrate information requirements into OPORD/ OPLAN 	DECISION BRIEF: <ul style="list-style-type: none"> - Approved CCIR - Information requirements
Standing CCIR Current staff estimates	EXECUTION: <ul style="list-style-type: none"> - React to change in mission - React to change in PIR, IR, EEFI, and FFIR - React to change in assumptions, facts, or critical events - Incorporate new information requirements 	NEW INFORMATION REQUIREMENTS

Commanders must be careful not to specify too much information as CCIRs, or the staff chances of obtaining the right information will diminish; a rule of thumb is to set a limit of six questions. The following are possible CCIR questions.

POSSIBLE CCIR QUESTIONS (ST 101-5 dated Feb 95)
<ul style="list-style-type: none"> - Can the unit still meet the higher commander's intent? - Where is _____ (one or more specific enemy units)? - What is the enemy doing? - How is the enemy doing what he is doing? - Where is _____ (one or more specific friendly units)? - What are friendly forces doing?

POSSIBLE CCIR QUESTIONS

- How are friendly forces doing what they are doing?
- What is the posture of friendly forces in the next planning time window (depending on the echelon of commands; for example, corps--72 hours, division--48 hours, and so on)?
- Where are the friendly forces expected to be in the subsequent time-planning period?
- What are the enemy's problems?
- How can the friendly forces exploit the enemy's problems?
- What are the friendly force's problems?
- How can the friendly force correct its problems?
- What are the enemy's opportunities?
- What are the friendly force's opportunities?
- How can the friendly force exploit its opportunities?
- Are any changes needed to the friendly force's concept, task organization, or mission?

HOW TO WAR-GAME (FM 101-5)

During the war game, the commander and his staff may change, modify, or develop a new COA after identifying other critical events, tasks, requirements, or problems. As a result, the staff determines that force allocations (including combat support and service support), dispositions, and the scheme of maneuver either are adequate or need adjustments, as appropriate. The staff also identifies shortfalls, mission hazards, risk reduction measures, and possible future developments or options for the plan or order. Unacceptable conditions or risks render a COA infeasible. General war-gaming rules include the following:

- Remain unbiased.
- Analyze each COA independently.
- Ensure each COA remains consistent with Army operations tenets.
- Continually assess each COA for feasibility.
- List advantages and disadvantages as they are discovered in the wargame.
- Base conclusions on the judgement of facts and assumptions.
- Compare COAs during the comparison process rather than during the wargaming substage.

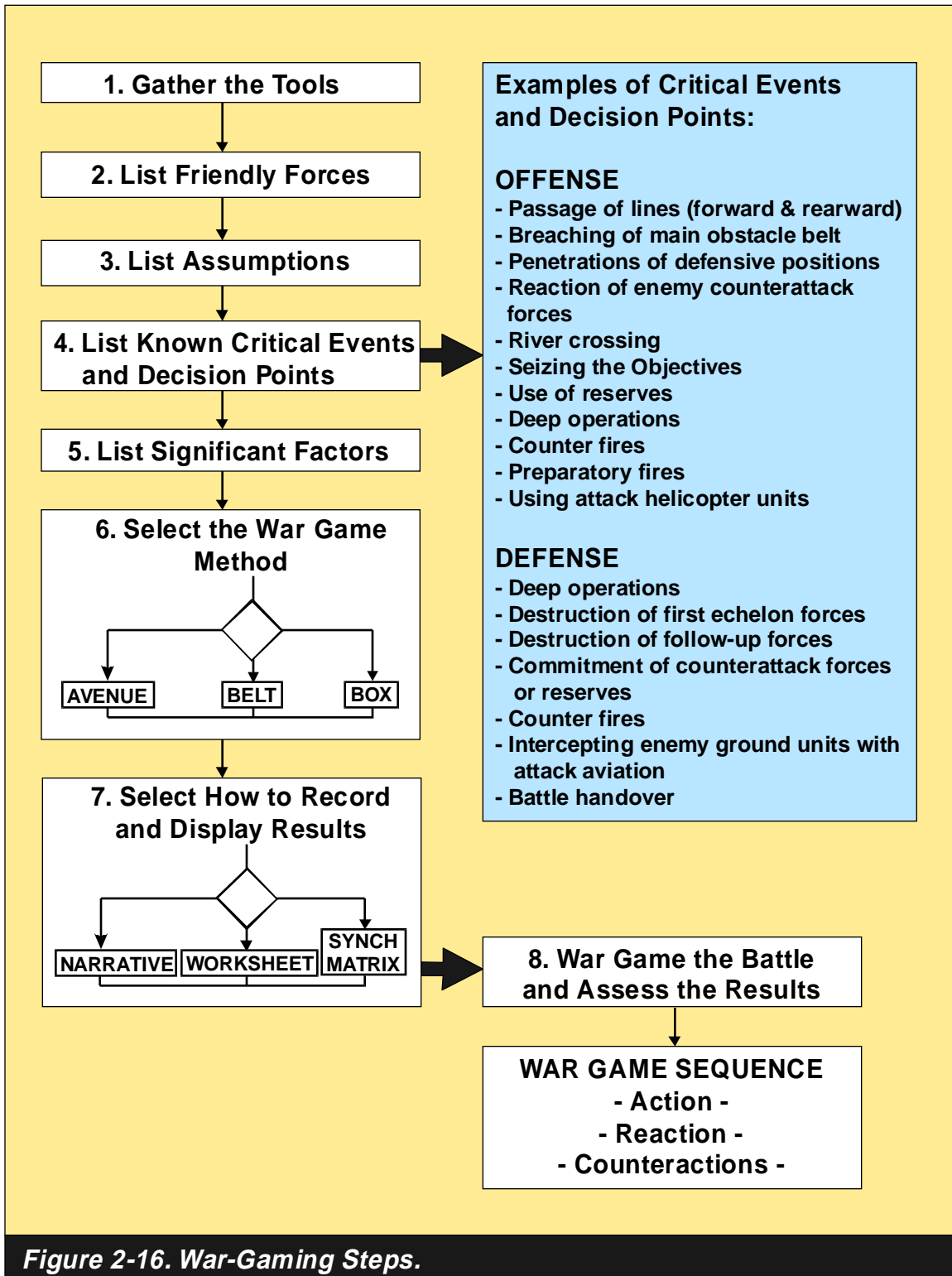


Figure 2-16. War-Gaming Steps.

WAR-GAMING : A TECHNIQUE

- Endstate is a fully synchronized battle plan
- Bring reference materials to the wargame
- Have scribe record for development of synch matrix
- Select enemy COA (most likely/dangerous, other)
- Select critical events
- Go through each BOS rep, in order, to determine how each could PREDICT, PRECLUDE, COUNTER the enemy's action or counter-reaction
- Action, reaction, counter-reaction
- Obtain desired effects on the enemy by arranging activities in time and space
- Set volume of direct and indirect fires to overwhelm enemy at the decisive point
- Set conditions, controls, and graphics
- Establish target areas of interest (TAIs) at OPFOR decision points
- Refine HPTs:
 - Ensure observer for each HPT
 - Locate military intelligence (MI) assets/ground vehicular laser locator designators (GVLLDs) to look for/kill HPTs
 - Conduct vulnerability analysis (where is HPT most vulnerable) and target accordingly. Example: FSE is most vulnerable at firing line; RAG moving through choke point.
 - Make all BOS's killers through depth of battlefield
 - Must match or overcome enemy flexibility through synchronizing continuous effects on him
- Plan branches and sequels
- Record results
- Refine R&S and observer plan
- Include force protection/safety in wargaming
- Publish changes to reconnaissance and surveillance (R&S) plan, target lists, etc.

WAR-GAMING GUIDELINES

UNIT	ACTION	CAPABILITY	STATUS
Bn TF	Attack	Defeats a company	Can no longer continue the attack for 4 to 12 hours
Bn TF	Meeting Engagement	Fixes a battalion	Can no longer continue the attack for 12 to 24 hours
Bn TF	Flank Counterattack	Defeats a battalion	Able to continue at reduced capability

WAR-GAMING GUIDELINES...CONTINUED

UNIT	ACTION	CAPABILITY	STATUS
Bn TF	Flank Counterattack	Fixes a regiment	Can assume other missions on completion of mission, rearming, and refueling
Bn TF	Defend	Defeats a regiment	Fully committed during attack
Bn TF	Delay	Defeats a regiment	High risk
Bn TF	Delay	Defeats a battalion	Low risk
Bn TF	Delay	Delays a regiment	Low risk
Bn TF	Penetration	Penetrates a battalion (with suppressive fires)	Can no longer continue the attack for 12 to 24 hours
Arty Bn	Suppression	Suppresses a maneuver company	Is fully committed during period of suppression; is then available to continue the battle
	Counterbattery	Suppresses an artillery battalion	
MLRS Plt	Suppression	Neutralizes an artillery battalion	Not immediately available; must move to hide position and rearm
AH BN	Attack	Defeats an enemy tank battalion in 1 hour employing mass tech	Daytime only except for AH-64
A-10 gnd spt A/C		Kills 2.2 tanks per sortie	Figure based on average sortie condition

REHEARSALS (ST 101-5 dated Feb 95)

Commanders must conduct rehearsals even when planning and preparation are compressed. Several types of rehearsals are available. The commander can select the one that strikes the closest balance between the time (including daylight hours) available to him, his subordinates' level of understanding of his concept of operations, and the OPSEC he must maintain.

There are generally seven types of rehearsals—full, key leader, terrain model, sketch map, map, radio, and backbrief. The preparations for these seven types range from extensive, in time and resourcing, to minimal preparation. (See FM 101-5 Appendix M for details.)

PREPARING FOR A REHEARSAL (ST 101-5 dated Feb 95)

■ THE COMMANDER'S RESPONSIBILITY ■

- The commander's role is crucial. He is the driving force in the interactive exchange of action, reaction, and counteraction.
- He focuses his staff to create the rehearsal conditions that best replicate the future battle.
- The detailed rehearsal planning should begin as soon as the commander approves a COA.

■ THE COMMANDER TAKES THE FOLLOWING STEPS ■

- STEP 1.** Selects the rehearsal technique that was issued in guidance.
- STEP 2.** Approves the plan and decides to rehearse the entire operation or only critical portions.
- STEP 3.** Refines the time plan. In an offensive operation, the time plan should begin with the first offensive action. In a defensive operation, the time plan begins with the sighting of the enemy or first expected enemy event.
- STEP 4.** Conducts the rehearsal. He, or his designated representative, plays the role of controller and commander. He orders the action by time or event just as he would in combat. (Intelligence officer plays the role of the enemy--actions and reactions).

"Rehearsals at every echelon supports the synchronization of elements of combat power and give commanders increased flexibility to make decisions and execute when the plan goes wrong."

COL John B. Sylvester
Cdr, 1st Bde, 2nd AD (DESERT STORM)

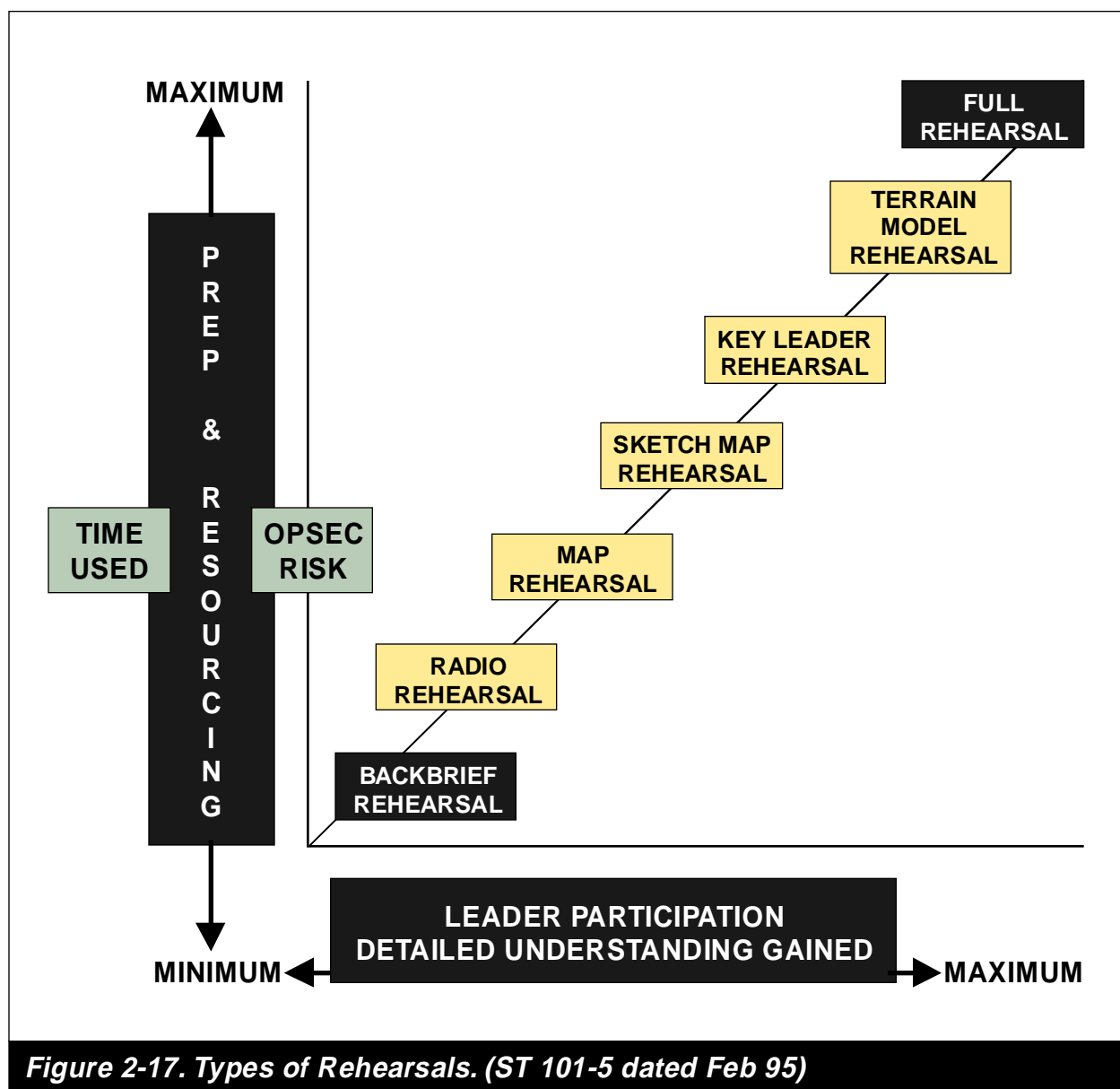
CONDUCTING A REHEARSAL (ST 101-5 dated Feb 95)

The commander should use the following sequential guidelines for the rehearsal:

- Orient participants to the training aid and the terrain.
- Define the standard (that is, what the commander will accept as satisfactory performance for the rehearsal).
- Visualize and synchronize the concept of operation. Verbally walk through the concept of operation.
- Focus on the key events and synchronization.
- Consider the enemy's COA (using the possibilities derived from the war game during COA analysis).
- Address any points in the operation where the execution of branches or sequels are likely to occur.
- If the standard is not met and time permits, be prepared to rehearse again.
- Make the necessary changes to the DST.

■ WHAT TYPE OF REHEARSALS? ■

The battlefield commanders endorsed rehearsals as invaluable to the success of the operations. Sand table exercises and unit rehearsals identified issues and helped solve problems that were not identified in the planning process. Commanders stressed the rehearsals were deliberate, detailed, and optimally attended by all players with all players contributing. Some units rehearsed the command and control of the operation using realistic distances and frontages expected of their maneuver forces. In some instances, it was discovered that the command and control structure did not support the scheme of maneuver and was adjusted prior to hostilities. Rehearsals, from corps to platoon, gave commanders a better appreciation of space and time available on the battlefield.



LTG Carl W. Stiner, Cdr, JTF SOUTH, commented on the importance of rehearsals for contingency operations; *"Another aspect of preparation that is absolutely critical in our business is rehearsals. We never do anything, unless it's an emergency where you have to have wheels up in four hours, without rehearsal. We had rehearsed Panama, to include all targets, before we ever went in."*

Leadership and Command in the Battlefield
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ROCKDRILL/REHEARSALS: A TECHNIQUE

- Limit to 1 to 1-1/2 hours.
 - Executors (not planners) do the talking (i.e., FSB commanders talks CASEVAC; S3/FA battalion discusses fire plan)
 - Late afternoon for brigade rockdrill is preferred
 - Bring Scout platoon leaders, Co/Tm commanders to brigade rehearsal
 - Permit no noise at the rockdrill
 - Conduct by critical event:
 - Enemy action
 - Units review subordinate tasks
 - Lookers and shooters
 - Staff steps in when there is lack of understanding
 - Conduct by battlefield framework
 - Also, conduct R&S, FS, and CSS rehearsals
 - Conduct rehearsals under chemical conditions.
-

SYNCHRONIZATION (ST 101-5 dated Feb 95)

"An Army is a team; (it) lives, sleeps, eats and fights as a team . . ."

General George S. Patton Jr.
(Speech to Third U.S. Army, 1944)

"Coordination of all arms and means is a basic consideration."

Von Leeb

Synchronization is the planning for massed effects of combat power at the specific place and time chosen by the commander. It involves the coordination of BOS, supporting and main efforts, fires (direct and indirect), echelons, and rear, close and deep battles. If the commander cannot visualize and articulate the integrated effects of his BOSs during conceptualization and planning, the force will not achieve synchronization during execution.

The commander must ensure that his battle staff specifically identifies all critical battlefield activities, estimates time and distance factors, and understands the mutually supporting relationships among them.

The synchronization lies in the ability to accurately reduce battlefield activities and their effects to specific time factors. Synchronization is facilitated when the battle commander, his staff, and subordinate commanders all plan, organize, and execute with the knowledge that each battlefield action involves time-distance relationships affecting other actions.

Synchronization does not automatically arise from a well-conceived concept of operations. It is an ideal that can be approached only through detailed planning, scheduling, and coordination by the battle commander's staff within the framework of his concept and intent. The cooperative missions of all the BOSs must be deliberately coordinated in time, space, and purpose. This deliberate coordination must be continually maintained as the situation changes.

"There is still a tendency in each separate unit . . . to be a one-handed puncher. By that I mean the rifleman wants to shoot, the tankier to charge, the artilleryman to fire . . . that is not the way to win battles. If the band played a piece first with the piccolo, then with the brass horn, then with the clarinet, and then with the trumpet there would be a hell of a lot of noise but no music. To get harmony in music each instrument must support the others. To get harmony in battle, each weapon must support the other. Team play wins. You musicians of Mars . . . must come into the concert at the proper place and at the proper time."

MG George S. Patton, Jr.
(Fort Benning, GA, 1941)

The Musicians of Mars, CATA 90-6, June 1990

SYNCHRONIZATION (TRADOC PAM 525-100-1)

It is the responsibility of brigade, division, and corps commanders to get battalions and companies, the units responsible for conducting the fight, to the right place, at the right time, in the right combination to fight and win battles, engagements, and campaigns. Success demands synchronization and the ability to integrate combined arms on the battlefield. Synchronization is defined in FM 100-5, *Operations*, as "the arrangement of battlefield activities in time, space, and purpose to produce maximum relative combat power at the decisive point." The commanders interviewed believed strongly that the key ingredients of a unit's ability to synchronize combat power on the battlefield were detailed plans, rehearsals, backbriefs, and contingency planning. However, commanders stated that the important product was not a rigidly applied synchronization matrix that they could not deviate from during the conduct of the battle.

BRIGADE SYNCHRONIZATION MATRIX (FM 71-3)

OPERATIONS	REAR	CLOSE	DEEP
Intelligence	PIR: Where/when threat airborne, air assault IPB	PIR: Location of threat 2d echelon IPB	EW disrupts enemy C31 IPB
Maneuver	OO rear threat	Reserve, main attack, follow and support, supporting attack, defend, delay	
Aviation	Respond to rear threat	JAAT and CAS on EAs	BAI, JAAT, Army aviation attack 2d echelon threat units; deliver FASCAM
Fire Support	Plan fires to support rear ops	Fires to support maneuver; SEAD Strip away recon	Interdict 2d echelon SEAD FASCAM on EAs to support deep ops
Air Defense	Passive AD	Combined arms active defense; Mixing/Massing of ADA	Early warning
Mobility/Countertermobility	Survivability of key logistics facilities	Mobility for maneuver and MSR Survivability of fighting vehicles, CPs	FASCAM on EAs, choke points
Nuclear, Biological, Chemical	Deliberate decon	Smoke for deception; Smoke on obj; NBC recon; Hasty decon	Smoke to disrupt, isolate echelons
Combat Support and Combat Service Support	Sustains the fight; Plans for future ops, reconstitution	Medical treatment and evac; Battlefield circulation; EPW evac and control; Maint teams fix fwd	
Command and Control	Bde rear CP; Ensures sustained battle	Bde main CP; Synchronizes CS and CSS; Fights rear ops; Plans close, deep ops; Monitors close fight Bde TAC CP; Fights close fight. Tactical deception.	